JVC

INSTRUCTIONS

GR-AX75

CAMERA-RECORDER/PLAYER

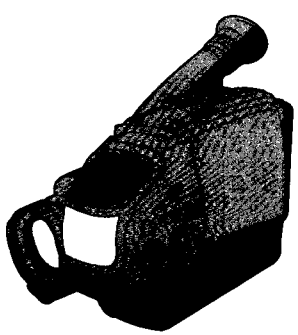
MANUEL D'INSTRUCTIONS: CAMERA-ENREGISTREUR LECTEUR
BEDIENUNGSANLEITUNG: KAMERA-RECORDER
MANUAL DE INSTRUCCIONES: CAMARA DE VIDEO
GEBRUIKSAANWIJZING: KAMERA RECORDER
BRUKSANVISNING: KAMERA BANDSPELARE
MANUALE DI ISTRUZIONI: TELECAMERA REGISTRATORE
INSTRUKTIONSBOG: VIDEOKAMERA
KÄYTTÖOHJEET: KAMERANAUHURI

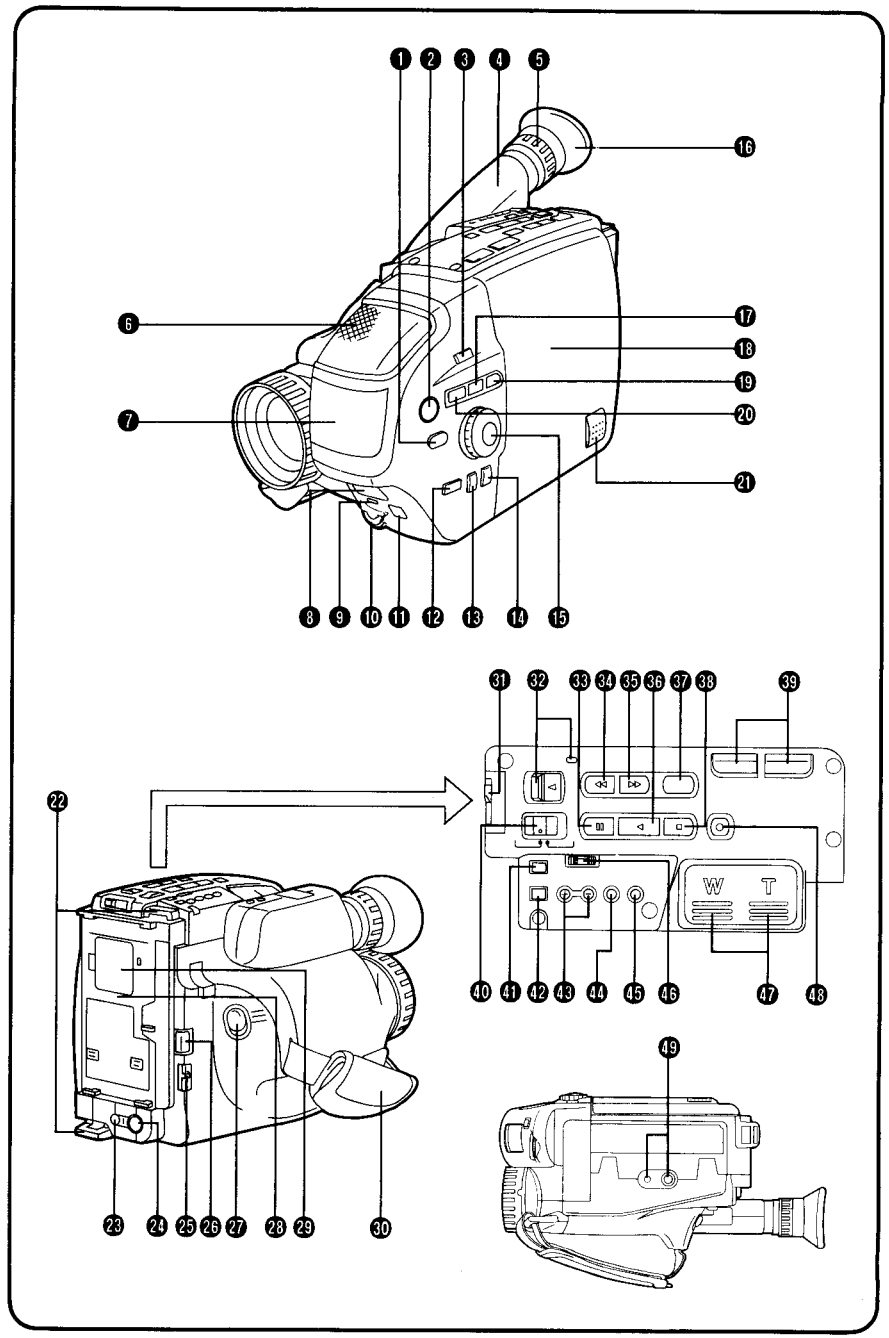
Specifically for the GR-AX75EG/AA-V11EG
Spécial pour le GR-AX75EG/AA-V11EG
Für modellausführung GR-AX75EG/AA-V11EG
Especialmente para la GR-AX75EG/AA-V11EG
Speciaal voor de GR-AX75EG/AA-V11EG
Speciellt avsedd för GR-AX75EG/AA-V11EG
Specifico per il GR-AX75EG/AA-V11EG
Specielt for GR-AX75EG/AA-V11EG
Erityisesti malleille GR-AX75EG/AA-V11EG

Compact VHS

videomovie

VHS C PAL





YU30052-378

SAFETY PRECAUTIONS

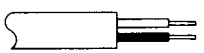
WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

The AA-V11EG AC Power Adapter/Battery Charger should be used with 110 — 240 V∿, 50/60 Hz only.
Caution:
To prevent electric shocks and fire hazards, do NOT use any other power source.

IMPORTANT (In the United Kingdom)
Mains Supply (240 V∿, 50 Hz only)

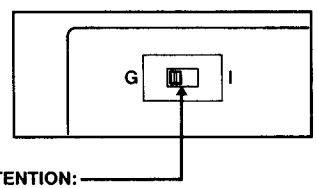
IMPORTANT

Do not make any connection to the Larger Terminal coded E or Green. The wires in the mains lead are coloured in accordance with following code:


Blue to N (Neutral) or Black
Brown to L (Live) or Red

If these colours do not correspond with the terminal identifications of your plug, connect as follows:
Blue wire to terminal coded N (Neutral) or coloured black.
Brown wire to terminal coded L (Live) or coloured Red.
If in doubt — consult a competent electrician.
Note
We recommend that you should disconnect the AC cord from the outlet.

Warning on lithium battery
The battery used in this device may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate.
Replace battery with Panasonic (Matsushita Electric) CR2025; use of another battery may present a risk of fire or explosion.
- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of in fire.



ATTENTION:
The system select switch on the side of the optional RF-V4E RF unit has been set to G (Continental PAL, 5.5 MHz).

CAUTION:
To prevent shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified personnel.

NOTES:
- The rating plate (serial number plate) and safety caution are on the bottom and/or the back of the main unit.
- The rating plate (serial number plate) of the AC power adapter/battery charger is on its bottom.

This unit is produced to comply with Directives 76/889/EEC, 82/499/EEC, 87/308/EEC and Standard IEC Publ. 65.

You are recommended to carefully read the cautions on page 40 and 41 before use.

VHS C PAL HQ High Quality

- VideoMovie is designed exclusively for the VHS-C video cassette. Only cassettes marked VHS-C can be used with this unit.
- HQ VHS is compatible with existing VHS equipment.

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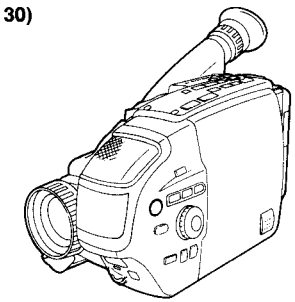
MAJOR FEATURES

- **Automatic 8-Segment Random Assemble Editing (☞ P. 30)**
- **Full function MBR (Multi-Brand Remote) (☞ P. 28 – 35)**
- **8-mode programme AE with special effects (☞ P. 16)**
- **20x digital zoom (☞ P. 15)**
- **Full Range AF system with Auto Macro (☞ P. 14, 15)**
- **Built-in design-integrated video light (☞ P. 21)**
- **Digital Image Stabilizer (☞ P. 18)**
- **Cinema mode (☞ P. 19)**
- **4-Lux low-light sensitivity**
- **Auto head cleaner (☞ P. 42)**



ENGLISH

JVC COMPACT VHS ADVANTAGES

☞ Convenience
Easy playback on your VHS deck — no hook-ups necessary.

☞ Conserve
Don't have to use the camcorder for playback — only half the camcorder wear.

☞ Comfort
Can use the deck's remote control and high speed REW and FF from your easy chair.

☞ Communication
Can send your tapes to others who also own a VHS VCR.

☞ Choice
Can also playback recordings through the viewfinder or connect directly to a TV.

This VideoMovie is designed to be used with PAL-type colour television signals. It cannot be used for playback with a television of a different standard. However, live recording and viewfinder playback are possible anywhere.
Use the BN-V12U/BN-V14U/BN-V22U/BN-V50U/BN-V60U battery packs and, to recharge them, the provided multi-voltage AC power adapter/battery charger. (An appropriate conversion adapter may be necessary to accommodate different designs of AC outlets in different countries.)

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CONTROLS AND CONNECTORS

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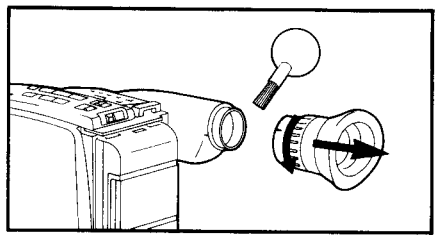
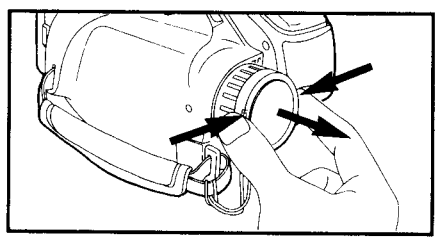
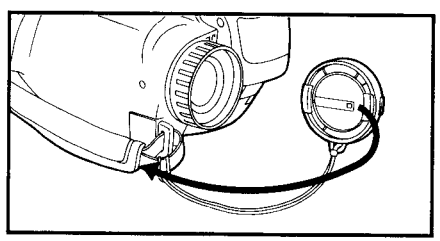


Cleaning the eyepiece
The viewfinder eyepiece can be removed for cleaning. Turn the eyepiece counterclockwise and pull it out.



Remove/reattach the lens cap
Remove or reattach the lens cap by pressing the tabs on either side of the lens cap.

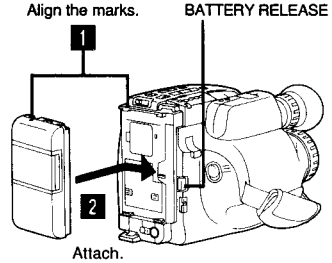


Attaching the lens cap to the hand grip, prevents it swinging while shooting.

QUICK OPERATION GUIDE

ENGLISH

SUPPLY POWER

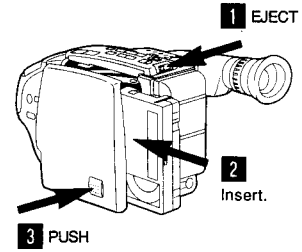


Using the battery pack

1. Align mark on battery pack with similar mark on back of VideoMovie. (Charging procedure, ☞ P.6)
2. Slide the battery pack in the direction of the arrow until it locks into place.

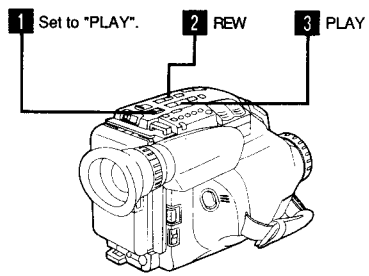
To remove the battery pack
Press BATTERY RELEASE and slide out the battery pack.

INSERTING A VIDEO CASSETTE



1. Slide EJECT.
2. Insert a video cassette.
3. Press PUSH.
(For more details, ☞ P.8.)

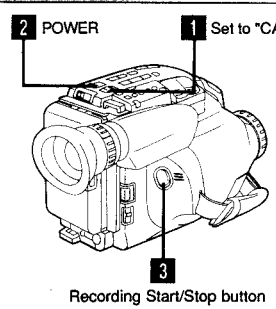
PLAYBACK



1. Set PLAY/CAMERA to "PLAY".
2. Press REW.
   — The tape will automatically stop at the beginning of the tape.
3. Press PLAY.
   — Playback starts and playback picture appears in the viewfinder.

■ To stop playback, press STOP.
(For more details, ☞ P.22.)

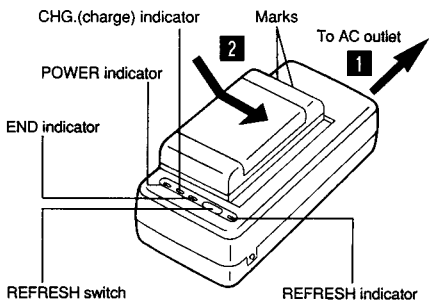
SHOOTING



1. Set PLAY/CAMERA to "CAMERA".
2. Slide POWER to turn power on.
   — The power indicator will light and image will be seen in the viewfinder.
3. Press the Recording Start/Stop button.
   — Recording starts.

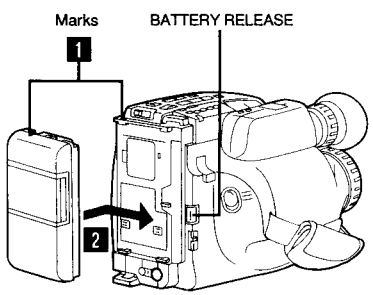
■ To stop recording temporarily, momentarily press the Recording Start/Stop button once again.
(For more details, ☞ P.10.)

PREPARATIONS



	Charging time	Discharging time
BN-V12U	approx. 70 min.	approx. 210 min.
BN-V14U	approx. 80 min.	approx. 270 min.
BN-V22U	approx. 130 min.	approx. 420 min.
BN-V50U	approx. 170 min.	approx. 510 min.
BN-V60U	approx. 130 min.	approx. 420 min.

- The diagrams above indicate the approximate charging and discharging times of battery packs that are fully charged.
- Charging time and discharging time will vary depending on the ambient temperature and the status of the battery pack.



Recording time

	Video light OFF	Video light ON
BN-V12U	approx. 55 min.	approx. 30 min.
BN-V14U	approx. 65 min.	approx. 40 min.
BN-V22U	approx. 110 min.	approx. 70 min.
BN-V50U	approx. 140 min.	approx. 85 min.
BN-V60U	approx. 110 min.	approx. 70 min.

- *The recording time per charge is influenced by the duration of the recording standby, frequency of zooming, etc. It is safer to have spare battery packs.*

POWER SUPPLY SYSTEM

The convenient 3-way power supply system gives you a choice of the most appropriate power supply unit, depending on the application.

- No function is available without power supply.
- Do not use any power supply other than specified.
- Never attempt to use these power supply units with any equipment other than the VideoMovie.
- The provided AC Adapter/Battery Charger features automatic voltage selection in the AC range from 110 V to 240 V.

WITH BATTERY PACK

The battery pack has been kept in the uncharged state for shipment. Therefore, before use, be sure to charge it.

Charging the battery pack

1. Connect the AC power cord to a wall outlet.
   — The power indicator lights.
2. Align marks and slide the battery pack in the direction of the arrow until it locks in place.
   — The CHG. indicator lights.
   — When charging has been completed, the END indicator will light.
3. Slide the battery pack in the opposite direction of the arrow.

Attaching the battery pack

- Before attaching the battery pack, insert the lithium battery.(☞ P.9)

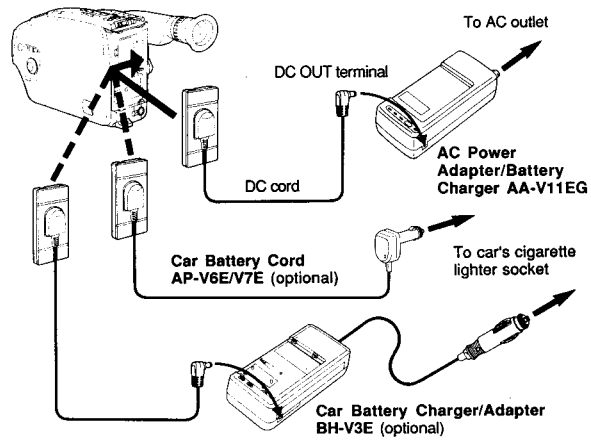
1. Align mark on battery pack with similar mark on back of VideoMovie.
2. Slide the battery pack into place in the direction of the arrow until it locks in place.

To remove the battery pack:
Slide out the battery pack while pressing BATTERY RELEASE.

Using the REFRESH feature

The REFRESH feature on the AC power adapter AA-V11EG allows you to completely discharge the power from the battery pack before charging. After charging the battery pack several times, the actual battery operating time will gradually decrease. For this reason it is recommended to use the REFRESH feature only after every 5 charges.

1. Attach the battery pack to the adapter as illustrated above.
2. Push REFRESH.
   — The REFRESH indicator will light and discharging will begin.
   — After discharging is completed, the indicator will go off.


To AC outlet
DC OUT terminal
AC Power Adapter/Battery Charger AA-V11EG
DC cord
Car Battery Cord AP-V6E/V7E (optional)
To car's cigarette lighter socket
Car Battery Charger/Adapter BH-V3E (optional)

WITH AC POWER

Use the AC Power Adapter/ Battery Charger.

Note:
This unit can be used with 110 V to 240 V power supplies. Selection is automatic and no adjustment is required.

IN A CAR

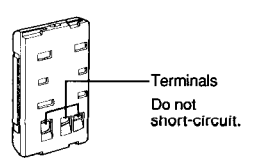
Use the optional BH-V3E Car Battery Charger or AP-V6E/ AP-V7E Car Battery Cord. Before use, refer to the instruction booklet.

Notes:

- Do not repeatedly recharge a battery pack without fully discharging it. Its service life will decrease. Use the REFRESH feature after every 5 charges.
- Even if a battery pack is fully charged, but is not used, it naturally discharges gradually. Be sure to recharge the battery pack just before using it, or the day before you intend to use it.
- This unit becomes warm due to the flow of electric current inside. Operate it in places having good ventilation. Do not allow it to discharge in a container, such as a bag, etc. Blocking the ventilation causes the temperature inside the unit to rise, possibly resulting in a damaged unit.
- If either recharging or discharging is stopped in the middle of the process, remove the battery pack before unplugging the AC cord.
- This unit incorporates an over-discharging protection circuit; however, immediately remove the battery pack from this unit after discharging has been completed to maintain the battery pack's capacity.
- If used near a radio, the AC power adapter may interfere with reception.
- Be sure to unplug the DC cord before charging or discharging the battery pack.
- Before storing the battery pack for a long period it is recommended to discharge it. To discharge the battery pack, unplug the AC adapter and attach the battery pack before activating the REFRESH function. When activated, the REFRESH indicator will light. When discharge is completed, the indicator will go off.
- The REFRESH feature will not function if the power status of a battery pack is discharged (No power remaining).
- When the CHG.indicator is blinking, the battery pack has become hot. Wait for a while for the battery pack to cool. With a just-purchased battery pack, or with a battery pack that has been stored for a long period, the CHG.indicator may not light properly. In such a case, remove and reattach the battery pack again, then do the recharging procedure. The CHG.indicator should light during recharging to indicate, the battery pack is normal. If this is not the result, consult your nearest JVC dealer.

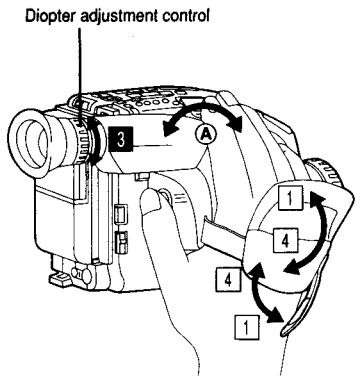
A WORD ON THE EXCLUSIVE BATTERY PACKS

The battery packs are nickel-cadmium batteries and nickel-metal hydride batteries. Be sure to carefully read the caution attached to the battery pack.



Temperature ranges:
The recharging time is based on room temperature of 20°C.
The lower the temperature, the longer the recharging time.
For charging: 10°C to 35°C
For operating: 0°C to 40°C
For storing: –10°C to 30°C

ENGLISH



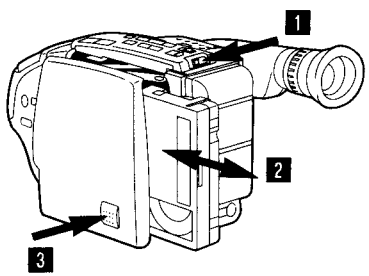
ADJUSTING THE GRIP STRAP

1 Separate the Velcro strip to expand the loop.
2 Pass your right hand through the loop and grasp the grip.
3 Adjust the length of the strap so that your thumb and fingers can easily manipulate the Recording Start/Stop button and power zoom buttons.
4 Refasten the Velcro strip.

VIEWFINDER ADJUSTMENT

- **Positioning**
  The viewfinder can be positioned for best viewability (Ⓐ).
- **Diopter adjustment**
  The viewfinder lens can be adjusted to suit the operator's eyesight.

1 Set PLAY/CAMERA to "CAMERA".
2 Slide POWER to turn power on.
3 Turn the diopter adjustment control until the indications in the viewfinder are clearly focused.



LOADING AND UNLOADING A VIDEO CASSETTE

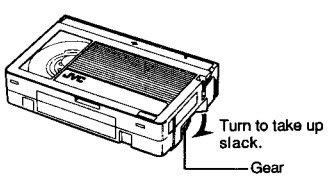
Loading

1 Slide EJECT. — The cassette holder opens.
2 Insert the cassette with its label facing outward.
3 Press PUSH to close and lock the cassette holder.

Unloading

1 Slide EJECT. — The cassette holder opens.
2 Remove the cassette.
3 Press PUSH to close and lock the cassette holder.

Notes:

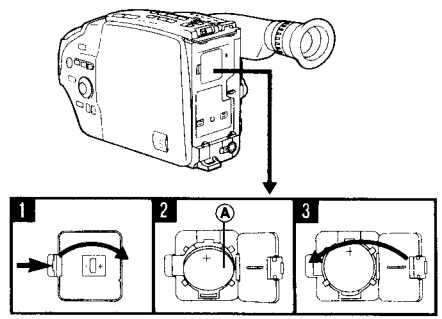


- Ensure that tape is not slack inside the cassette, then load the cassette correctly.
- Do not repeat loading and unloading of the cassette without running the tape, as this will slacken the tape, causing tape damage.
- The cassette holder can be opened even when the power is off.

DATE/TIME/BIRTHDAY SETTING

CLOCK (LITHIUM) BATTERY INSERTION

Necessary for clock and date/time/age settings.
* Switch off the unit's power and remove the power suppply unit before inserting or removing the clock battery.



1 Open the clock battery compartment cover while pressing the release tab.
2 Insert the provided lithium battery with the plus (+) side up and push it in.
  * When removing the battery, push Ⓐ and lift it up.
3 Close the compartment cover until it clicks in place.

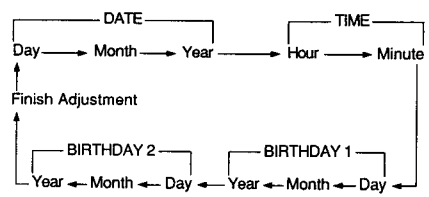
Warning on lithium battery
- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of it in fire.

(See Warning on lithium battery, ☞ P.2)

SETTING DATE/TIME/BIRTHDAY

Before adjusting the date, time and birthday for the first time or after replacing the battery.

1 Slide POWER to turn power on.
2 Set PLAY/CAMERA to "CAMERA".
3 Press DISPLAY. — The day blinks.
4 Press SET (+/–) to choose the correct day.
5 Press SELECT to select the next item to change. The item selected changing in the sequence below:



6 Procedures in steps 4 and 5 allow you to set Date and Time.
  After the Time has been set proceed to the Birthday setting.

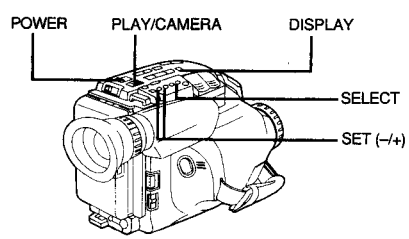
Setting the "Birthday"

The VideoMovie is provided with a "Birthday" memory function so that once someone's date of birth is entered into memory, the unit can display and record his or her age, automatically calculated to the current dates of the scenes. The "Birthday" memory accommodates 2 different settings (birthdays).

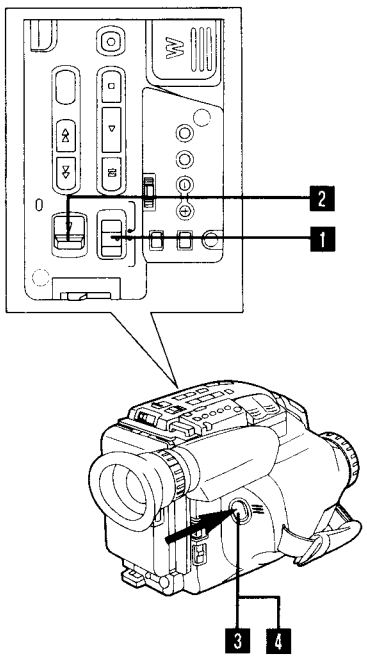
- Age-indication appears as follows:
  Under one-month-old ..... 1D to 31D
  Under one-year-old 1M to11M
  Under 7-year-old ..... 1Y0M to 6Y11M
  7 and over 7-year-old ..... 7 Y to 99Y

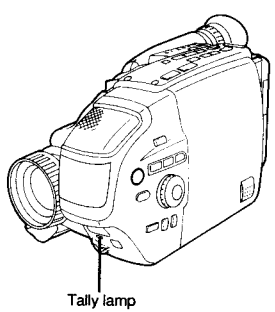
7 Make the settings for the items of BIRTHDAY 1 and/or BIRTHDAY 2 as described in steps 4 and 5.
  - When MODE is pressed during input of either BIRTHDAY, this clears the date from that setting. (Both BIRTHDAY 1 and BIRTHDAY 2 can be cleared.)
8 After all items have been set, press SELECT.
  — Now that the setting is completed, blinking stops. The date will appear after the date, time and age have been displayed for about 3 seconds. At this time, ages 1 and 2 are displayed for about 1.5 seconds each. (If a BIRTHDAY is blank, then "– – –" is displayed instead of an age.)

Notes:
- The clock begins timekeeping when the minute portion stops blinking and remains constantly lit. While the Date or Time are blinking, the clock does not keep time. Be sure to confirm the correct time when setting the Birthday.
- When re-adjusting the data, press DISPLAY to display each item and press SELECT and SET to correct them. After adjustment is completed, the date, time and age appear for about 3 seconds, then the display returns to the mode before correcting.



RECORDING OPERATION





SHOOTING

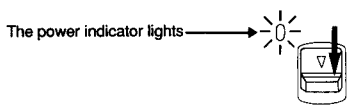
Preparations

- Supply power.(☞ P.6.)
- Insert a video cassette correctly. (☞ P.8.)
- Adjust the grip strap. (☞ P.8.)

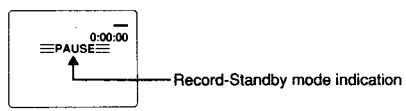
1. To enter the Record-Standby mode

1 Set PLAY/CAMERA to "CAMERA".

2 Slide POWER to turn power on.

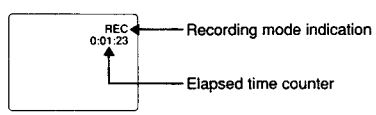


— The VideoMovie enters the Record-Standby mode.
The aimed-at scene will appear on the viewfinder screen.



2. To shoot the scene

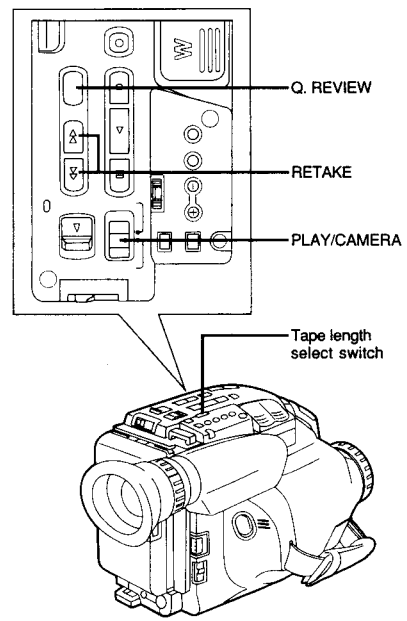
3 Press the Recording Start/Stop button to start recording.
— The tally lamp lights while the recording is in progress.

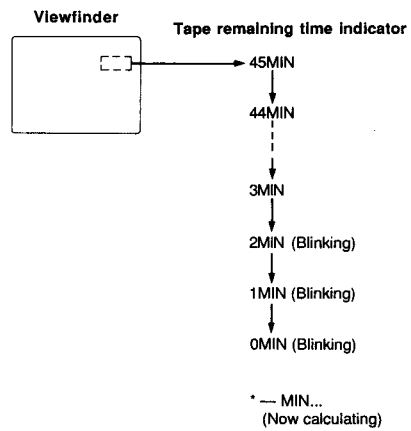


4 To stop recording temporarily.
Press the Recording Start/Stop button again.
- To restart recording.
  Press the Recording Start/Stop button.
- Repeating steps 3 and 4 produces assemble recordings.

Notes:

- For a longer pause, slide POWER to turn power off to save power.
- When a tape reaches its end during recording, "TAPE END" indicator will appear in the viewfinder and POWER itself off automatically if left for longer than 5 minutes.
- If the Record-Standby mode continues for longer than about 5 minutes, the unit switches itself off automatically. To restart recording, turn the power on and press the Recording Start/Stop button. This makes clean assembled recordings possible even after a long pause.
- When digital modes are engaged, there will be a decrease in resolution and the picture will appear coarser than normal.





QUICK REVIEW

If you want to review the end of the last recording for confirmation, use this function.

- Press Q. REVIEW from the Record-Standby mode.
  — The tape will be rewound for about 2 seconds of program time and played back automatically for this section, after which it will pause in the Record-Standby mode for the next shot.

Note:

Distortion might occur when playback starts. This is normal.

AUTO-REHEARSAL

Rehearsal mode is automatically engaged in the following situations:
PLAY/CAMERA is set to the "CAMERA" position and;
= no cassette is loaded, or
= a cassette without its safety tab is loaded.

- Rehearsal mode is not engaged when PLAY/CAMERA is set to "PLAY".

RETAKE

While recording, you may decide to re-record certain segments. The Retake function is convenient for this.

1 Make sure the VideoMovie is in the Record-Standby mode. (If not, engage the mode.)

2 Press either RETAKE to reach the point where you wish a new recording to start.
- When RETAKE is released, the camera will enter the Record-Standby mode again.

3 Press the Recording Start/Stop button.
— Recording starts.

Note:

Noise may appear during Retake. This is normal.

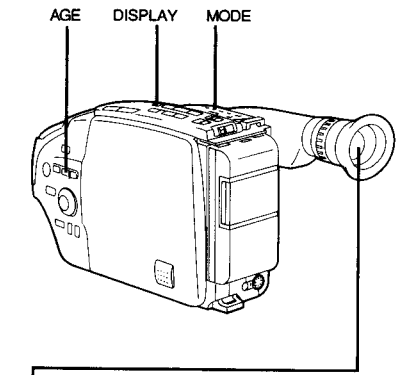
TAPE REMAINING TIME

The tape remaining time is displayed in the viewfinder as shown. Before shooting, set the tape length select switch according to the tape being used.

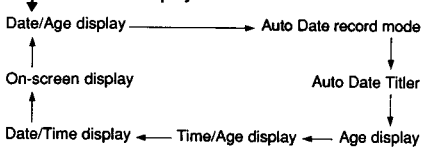
- **EC-30:** When using a tape with 30-minute recording time or less.
- **EC-45:** When using a tape with recording time more than 30 minutes.

Notes:

- The indication will start blinking when the remaining tape time reaches 2 minutes.
- The indicated remaining time is approximate.
- The time required to calculate the remaining tape length and accuracy of the calculation may vary according to the type of tape used.
- "TAPE END" appears when the tape reaches its end. "TAPE END" also appears when a cassette is loaded whose tape is already at its end.



Viewfinder display



Date/Time/Age recording indications

Date /Age display	AUTO DATE record mode	
25. 12. 93 6Y11M	AUTO DATE	25. 12. 93
	Auto date record mode	Auto date record executed
Auto date titler	**Age display**	**Time/Age display**
25. 12. 1993	6Y11M	23:59 6Y11M
Date/Time display		
25. 12. 93 23:59		

DATE/TIME/AGE RECORDING

The date/time/age can be displayed and recorded according to the selected mode.
Press MODE to cycle through the modes in the left order:

- The selected display mode will be recorded when it is displayed on the viewfinder screen; when it is not displayed, no display recording takes place. Pressing DISPLAY turns it ON and OFF.

Note:
During Date/Age display, Age display, Time/Age display and On-screen display, the age will not be displayed unless the AGE button is pressed. Pressing AGE will display the following in this order:

No age display → Age 1 → Age 2

(Unless a birthday is input, ☞P.9, the age will not be displayed.)

Auto Date-Record function

This function allows the date (day, month and year) to be automatically recorded for about 5 seconds following the first operation of the Recording Start/Stop button:

= after changing the date.
= after a cassette is loaded, or
= after "AUTO DATE" mode is selected by MODE.

- The viewfinder indication shows the date during initial 5 seconds, then changes to "AUTO DATE".
- The auto date record reserve indication will disappear if DISPLAY is set to off. Reapplying power will bring back the indication.

Auto Date Titler

When set to this mode, the date (day/month/year) will be displayed in large characters in the centre of the viewfinder screen. The date is recorded for 5 seconds at the beginning of each recording in the following situations:

= after changing the date,
= after a cassette is loaded, or
= after the Auto Date Titler mode is selected by pressing MODE.

- The date of Auto Date Titler will not be recorded if DISPLAY is pressed before starting recording, regardless of the above situations.
- The date of Auto Date Titler can be recorded for 5 seconds anytime by pressing DISPLAY during shooting, even if it was recorded or not displayed at the beginning of the recording.
- To cancel the Auto Date Titler mode during shooting, press DISPLAY.

Note:
The date of Auto Date Titler can be recorded repeatedly during shooting, but it cannot be inserted more than 5 seconds at a time.

ASSEMBLE RECORDING TECHNIQUES

To replace the battery pack during recording:

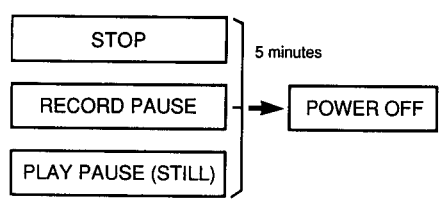
1. If the low-battery warning (⊂⊃) blinks in the viewfinder while recording, stop recording and slide POWER to turn off.
2. Replace the battery pack with a charged one.
3. Slide POWER to turn power on.
   — The unit will be in the Record-Standby mode.
4. Press the Recording Start/Stop button.
   — Recording starts.

To record onto a partially recorded tape:

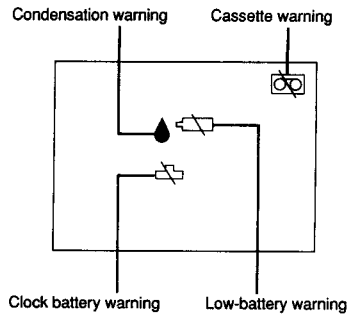
1. Set PLAY/CAMER to "PLAY" and press PLAY to playback the tape to a point where you wish a new recording to start.
   - Use REW or FF for faster location.
2. Press PAUSE at the located point.
   — The unit will enter the Still mode.
3. Set PLAY/CAMERA to "CAMERA".
4. Press the Recording Start/Stop button.
   — Recording starts.

POWER SAVE AND TAPE PROTECTION CIRCUIT

- To save power, the VideoMovie switches itself off automatically in the following situations:
  (1) When left for longer than 5 minutes in the Stop mode.
  (2) When left for longer than 5 minutes in the Record-Standby (Record-Pause) mode.
- To protect the tape, the VideoMovie (regardless of whether battery-operated or AC-powered) releases tape tension slightly and switches itself off automatically if left for longer than 5 minutes in the Record-Standby (Record-Pause) mode.
- For the same reason, the VideoMovie enters the Stop mode if left for longer than 5 minutes in the Still (Play-Pause) mode.



WARNINGS



LOW BATTERY WARNING (⊂⊃)
When the battery power is coming to an end, a battery warning indication appears in the viewfinder. After indication appears, the power turns off automatically. Replace the battery pack with a fully charged one.

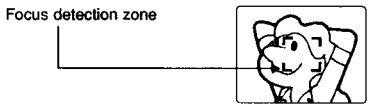
CLOCK BATTERY WARNING ( )
Blinks when the lithium battery is not in place or exhausted. In this condition, no date/time function is available.

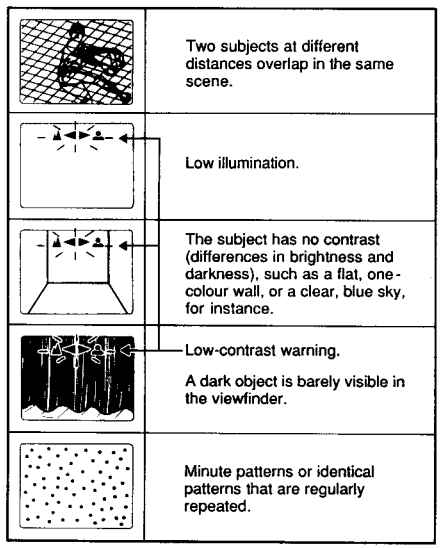
CONDENSATION WARNING ( )
Appears when the excessive moisture condensation occurs inside the unit.

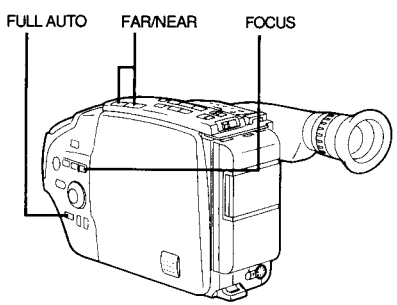
CASSETTE WARNING ( )
Blinks to warn that no cassette or a cassette without safety tab is loaded.

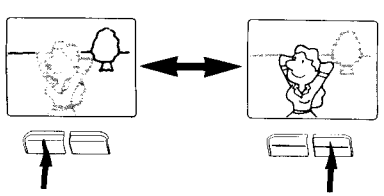
ENGLISH

ADVANCED VIDEOGRAPHY TECHNIQUES




Two subjects at different distances overlap in the same scene.
Low illumination.
The subject has no contrast (differences in brightness and darkness), such as a flat, one-colour wall, or a clear, blue sky, for instance.
Low-contrast warning.
A dark object is barely visible in the viewfinder.
Minute patterns or identical patterns that are regularly repeated.





FOCUSING

Auto-focus

The rectangular focus area, shown by the indicators in the centre of the viewfinder, detects focus.

Notes:

- If the lens is smeared with stains or blurred with condensation, accurate focusing is not possible. Keep them clean. If they become dirty, wipe with a piece of soft cloth. When condensation occurs, dry them by wiping with a soft cloth or wait for conditions in which they become dry.
- Correct focus may not be obtained in these situations on the left. In such case manual focusing should be performed to obtain proper focus.

Manual focus

For manual focus operation, proceed as follows:

1. Press FOCUS to release the Auto Focus mode.
   — The Manual Focus indicators (▲ 👤) appear and the focus detection zone disappears.
2. Zoom in on a subject by pressing "T".
3. Focus onto it by pressing either FAR or NEAR.
   - Press FAR.
     The ◄ indicator blinks. It will disappear when the button is released.
   - Press NEAR.
     The ► indicator blinks. It will disappear when the button is released.
   - When the focus level cannot be adjusted any farther or closer, the indicator (▲) or the indicator (👤) will blink.
4. Determine the composition by pressing "W".

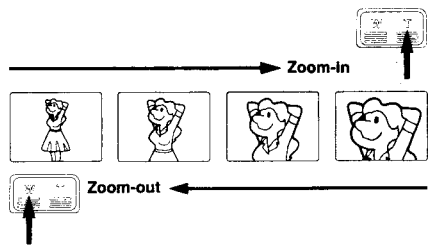
- **To release the Manual Focus mode** (to engage the Auto Focus mode):
  Press FOCUS, or FULL AUTO.
  — Manual focus indicators (▲ 👤) disappear and the focus detection zone appears.

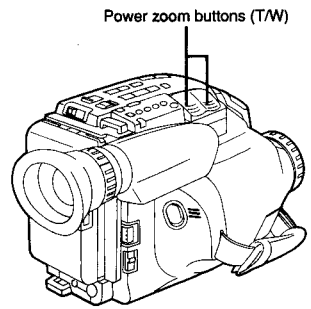
Notes:

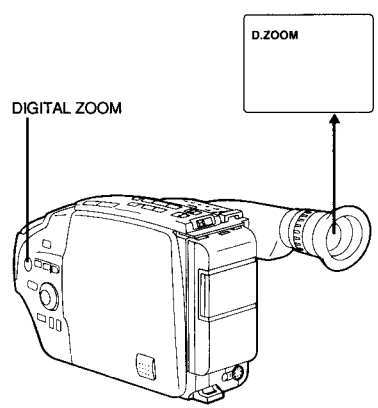
- When you use the Manual Focus mode, be sure to focus the lens in the maximum telephoto position. If you focus in on a certain subject in the wide-angle position, sharply-focused images cannot be obtained when zoomed up because the depth-of-field is reduced at longer focal lengths.
- When focusing manually, make neccessary viewfinder adjustments (☞ p. 8), then focus in.

CAUTION

When not in use, do not leave the VideoMovie in the Auto Focus mode with power on; otherwise light entering the lens will operate the auto-focus mechanism, consuming power.







Close-Up — Auto macro shot

The VideoMovie's Full Range AF system can offer continuous shooting ability from close-up to infinity.

Procedure for Macro shooting

Position the subject in the focus detection zone.

- For best results, increase illumination when shooting in the Macro mode.

ZOOMING

Pressing the power zoom buttons ("T" and "W") will vary the focal length of the lens.

Procedure

- Pressing T : Zoom in on the image (bring it nearer).
- Pressing W : Zoom out.

To engage Digital Zoom:

Digital zoom offers double the magnification of normal zoom. (Maximum approx. 20x)

1. Press DIGITAL ZOOM.
   — "D. ZOOM" will appear in the viewfinder.
2. Press T/W to zoom in/out.

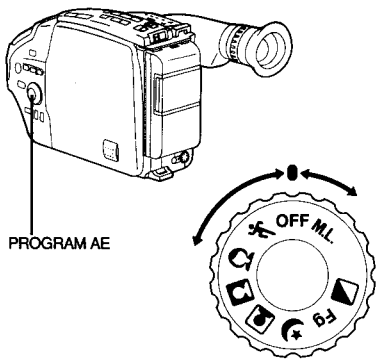
To disengage Digital Zoom:

Press DIGITAL ZOOM again.

Notes:

- Focusing may become unstable during the zooming-in operation. In this case, first zoom in in the Recording Standby mode then, after using the manual focusing to hold the focus fixed, zoom in or out in the Record mode.
- When shooting low-contrast subjects in the Zoom-in mode, the VideoMovie automatically zooms out with the low contrast indicator blinking and focus being performed.
- When the battery is replaced, the zoom lens will reset to the telephoto position.

ENGLISH



PROGRAMME AE WITH SPECIAL EFFECTS

A variety of creative shooting effects are accessible with PROGRAM AE select dial.

To engage any of the effects:

Turn the PROGRAM AE select dial so that the desired indication appears in the viewfinder.

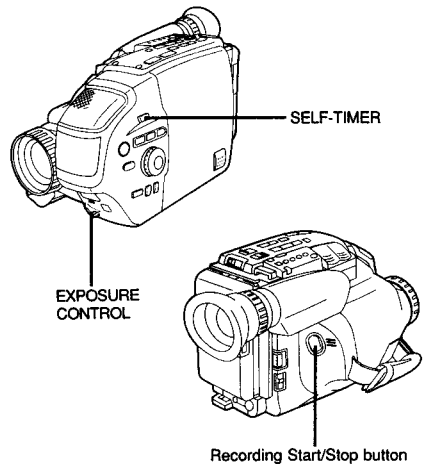
To cancel the effect:

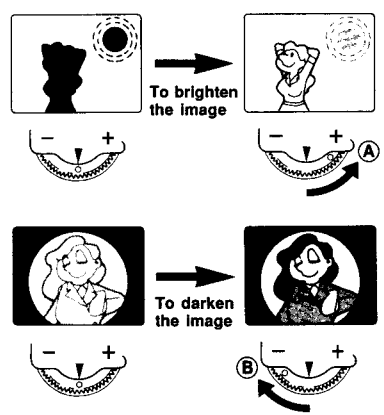
Turn the dial to "OFF".

Notes:

- Only one Special effect can be activated at a time.
- During SPORTS and PORTRAIT mode, the viewfinder will display "AE" instead of shutter speed, and the actual shutter speed will be regulated automatically.
- If the "M. LOCK" indication is blinking in the viewfinder, press FULL AUTO or turn the dial to "OFF" first and then set it back to "M.L." (If the "M. LOCK" indication left blinking while shooting, normal shooting results cannot be attained.)

Effect			What it does/When to use
Mode	Symbol	Viewfinder indication	
Manual Lock	M.L.	M. LOCK	Instantly locks the VideoMovie's settings (focus, shutter speed, white balance, iris and AGC) at their present positions. Suitable for shooting stage performances, etc. where sudden and rapid changes in lighting can occur. ■ FOCUS FAR/NEAR buttons can be used. ■ SHUTTER, MWB and EXOPSURE CONTROL will become inactive. ■ Keeping FULL AUTO pressed activates the VideoMovie's full auto operation mode. When FULL AUTO is released, the settings will revert to those before FULL AUTO was released. (However, since it may take a while for white balance to adjust, it is recommended that you connect the VideoMovie to a colour monitor TV and keep FULL AUTO pressed until white balance stabilizes.)
Sports		SPORTS	Uses high shutter speed to clearly capture fast-moving action with less blur. Clarity is especially noticeable during slow motion playback on a video deck. Great for sports, races, etc.
Portrait		PORTRAIT	Reduces depth-of-field so the background becomes blurry while the subject remains clearly focused. Use it for beautiful portrait shots.
Back-Lit Compensation		B-LIT	Compensates for backlighting that may cause subjects to appear too dark; like a person standing in front of a window, with the sun to his back, etc.
Front-Lit Compensation		F-LIT	Compensates for washed-out images that can occur with subjects that are spotlighted from the front. Ideal for weddings, stage plays, etc.
Twilight		TWILIGHT	Disengages the auto gain control, high-speed shutter and auto focus (manual focus is activated), and automatically sets focus to infinity and white balance to OUTDOOR mode. Dusk and twilight scenery, fireworks, etc. look more natural and dramatic. ■ Manual adjustment of shutter speed (☞P.20), white balance (☞P.18), and focus (☞P.14) is possible. ■ Pressing FOCUS re-engages the auto focus mode.
Electronic Fog filter	Fg	FOG	Makes the picture look misty white; similar to the effect when an external fog filter is attached to the lens. Useful when you want to soften an image slightly or give it a "fancy" look.
Monotone		MONOTONE	The scene being shot will be recorded in sepia-tinted monochrome, making it look like an old movie. By using it in combination with Cinema mode (☞P.19), you can recreate the authentic look of a classic Hollywood movie.

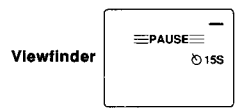




SELF-TIMER

The Self-Timer function lets you delay the start of recording after the Recording START/STOP button has been pressed. If the VideoMovie has been secured, the operator can enter the picture before actual recording begins.

1. Put the VideoMovie into the Record-Pause mode.
2. Press SELF-TIMER to enter the Self-Timer mode.
   — "⏲15S" is displayed in the viewfinder.



3. Press the Recording START/STOP button.
   - Recording begins automatically after 15 seconds.
   - When performing Self-Timer shooting, the tally lamp will start blinking approximately 10 seconds before the actual recording begins. Then when recording starts, the lamp lights normally to indicate recording is in progress.

To release the Self-Timer mode:

When "–" is not blinking:

Press SELF-TIMER again.

When "–" is blinking:

Press START/STOP to stop the blinking, then press SELF TIMER.

- Turning the power off and on once engages the regular Record-Pause mode.

EXPOSURE CONTROL

The conveniently located EXPOSURE CONTROL dial allows manual adjustment of the VideoMovie's iris. It is useful when you want a brighter/darker image, as well as when the Front-Lit or Back-Lit Compensation mode (☞ p. 16) is not effective enough.

To brighten the image:

Turn the dial in the direction of Ⓐ (+).

To darken the image:

Turn the dial in the direction of Ⓑ (–).

To return to pre-set standard:

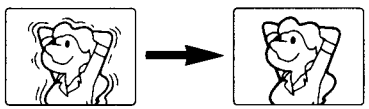
Turn the dial to the middle (▼) position.

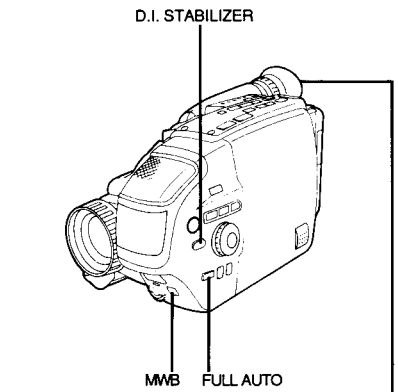
- When shooting under normal conditions, make sure that the dial is set at the middle position.

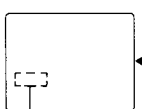
Note:

Even during manual exposure control, the auto iris remains active to optimize exposure within the brighter or darker level that has been manually selected.

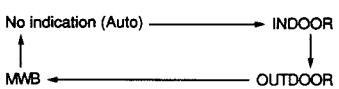
ADVANCED VIDEOGRAPHY TECHNIQUES (Cont'd)







White balance mode indicator



DIGITAL IMAGE STABILIZER

To compensate for the unstable images caused by camera-shake (especially noticeable at high zoom ratios), this VideoMovie incorporates a Digital Image Stabilizer.

To engage the Digital Image Stabilizer:

Press D.I. STABILIZER.

- D.I.S. will appear in the viewfinder.

To disengage the Digital Image Stabilizer:

Press D.I. STABILIZER again.

WHITE BALANCE ADJUSTMENT

This VideoMovie's Automatic Colour Temperature system senses the colour temperature of the ambient lighting for automatic white balance adjustment. However, precise colour temperature adjustment is not possible under the following conditions:

- The object is in various shades of the same colour.
- Predominantly red or brown object is being shot outdoors.

In these cases, use the VideoMovie's built-in filters for white balance adjustment.

To adjust the white balance:

Press MWB (Manual White Balance) so that the required indication appears in the viewfinder.

INDOOR ..... When the source of illumination is a halogen or tungsten lamp.
OUTDOOR ..... When you shoot in the daytime outdoors.
MWB ..... In the following situations.

How to use the MWB mode

In the MWB mode, the VideoMovie automatically adjusts the colour temperature of the subject's light source and keeps that colour temperature during shooting. When shooting some subjects with different colour temperatures, use the MWB mode to set a colour temperature and you can shoot with natural colours that are not affected by surroundings.

1. Press MWB until "MWB" appears in the viewfinder.
2. Point the VideoMovie at a white, flat object such as a sheet of white paper.
   Adjust focus manually.
3. Keep MWB pressed for more than about 3 seconds.
   - ❶ "MWB" blinks in the viewfinder ..... During adjustment
   - ❷ "MWB" is lit ..... Adjustment is finished
   - — The VideoMovie is now ready for shooting.

Note:

Re-adjust the MWB mode in the following conditions:

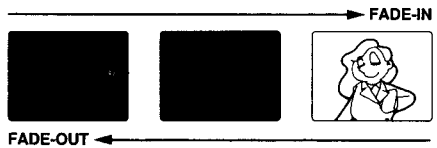
- When the lighting has changed.
- When the VideoMovie has been turned off and on again.
- When the PLAY/CAMERA switch position has been changed.

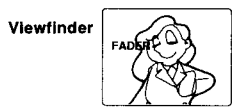
To switch to automatic adjustment:

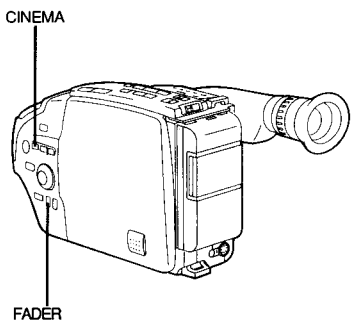
Press MWB until the indication disappears, or press FULL AUTO.

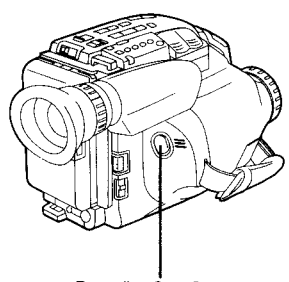
Useful tip:

It is helpful to connect your VideoMovie to a colour monitor when adjusting the white balance.

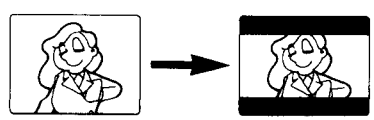








Recording Start/Stop button



Cinema mode

FADER

This VideoMovie incorporates a fader function which allows smooth video fade-in and fade-out to a black blank screen.
(With the Electronic Fog filter mode (☞ p. 16) engaged, the image fades in/out to a white (gray) screen.)

Fade-in

1. Press FADER.
   - — The VideoMovie enters into the Fade-Standby mode and "FADER" appears.
2. Press the Recording Start/Stop button.
   - — The screen immediately becomes blank and recording begins. Fade-in starts at the moment the Recording Start/Stop button is released.
   - If the button is not released, the screen will remain blank and be recorded as long as the button is kept pressed.

Fade-out

1. Press FADER in the Recording mode.
   - — The VideoMovie enters the Fade-Standby mode and "FADER" appears.
2. Press the Recording Start/Stop button.
   - — The viewfinder indications start blinking. Fade-out starts and will be completed in a few seconds.
   - When completed, the VideoMovie enters the Record-Standby mode automatically. At this time, if the button is not released, the screen will remain blank and be recorded as long as the button is kept pressed.

Note:

The screen will become slightly reddish when the fader function is used in the Monotone mode. (☞ p. 16).

CINEMA MODE

This VideoMovie incorporates a "Cinema" mode recording function which allows you to record black bars at the top and bottom of the screen to produce a cinema-like "wide-screen" effect.

To engage the Cinema mode:

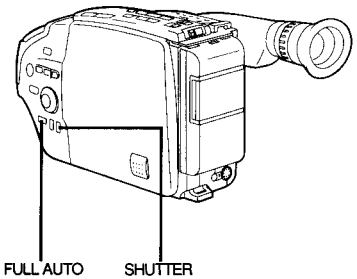
Press CINEMA.

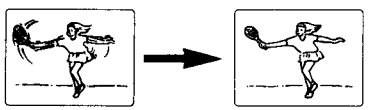
To restore the normal screen:

Press CINEMA again.

Note:

The Cinema mode can be engaged only in the Record-Pause, Record or Rehearsal mode.





Standard mode | High-Speed Shutter mode

MULTIPLE-SPEED ELECTRONIC SHUTTER

The VideoMovie is equipped with a selectable high-speed shutter that allows better recording of quick movements for sharp, clear stills or slow-motion playback.
Select it when taping fast-action shots that you will want to play back later on a VCR equipped with the Still or Slow-motion mode.

1. Press SHUTTER to switch to the desired electronic shutter speed while recording or in any other mode.
   — Continues at the selected speed until switched to another speed.
2. Select the shutter speed by pressing SHUTTER.
   — The shutter speed changes in the following order:

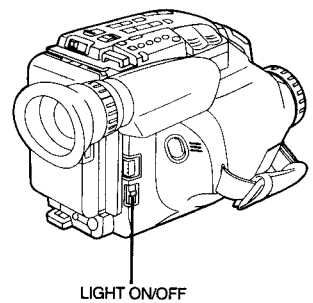
Standard (No indication) → S50(1/50) → S60(1/60) → S125(1/125) → S250(1/250) → S500(1/500) → S1000(1/1000) → S2000(1/2000) → S4000(1/4000) → S8000(1/8000) → Standard (No indication)

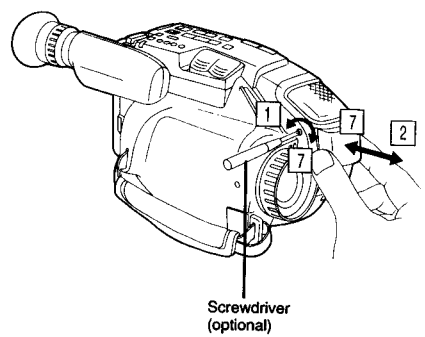
- When a high shutter speed is selected, it is indicated in the viewfinder screen.

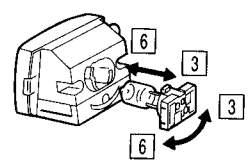
3. When finished recording the fast-action scene, switch back to the standard shutter speed by pressing SHUTTER until the shutter mode indicator in the viewfinder disappears.

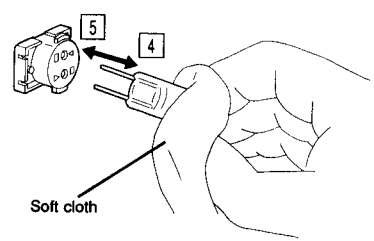
Notes:

- High-Speed Shutter modes require slightly more subject illumination than the standard shutter speed. If lighting is insufficient, switch to the standard shutter speed.
- Picture colour may be adversely affected in High-Speed Shutter modes when the subject is lit by alternating discharge-type light sources such as fluorescent or mercury-vapour lights.
- When playing back a section recorded in High-Speed Shutter mode, movement of subjects in the picture may not be smooth. This is not due to any defect of the unit.
- Pressing FULL AUTO also restores the shutter speed to the standard shutter speed.









LIGHTING

To apply more light to the scene

When natural lighting is too dim, you can brighten the scene by using the built-in video light.
Use the LIGHT ON/OFF switch to turn the video light on or off.

- It is recommended to set the white balance to INDOOR mode (☞P.18) when you use the video light.
- When not using the video light, turn it off to save battery power.
- The video light can be used with the VideoMovie's PLAY/CAMERA set to "CAMERA".

CAUTIONS:

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the VideoMovie into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.

Note:

Even if the battery warning indication (⊏▭) does not appear in the viewfinder, if the battery pack's charge is low, the VideoMovie may turn off automatically when you turn on the video light, or when you start recording with the video light turned on.

HOW TO REPLACE THE VIDEO LIGHT BULB

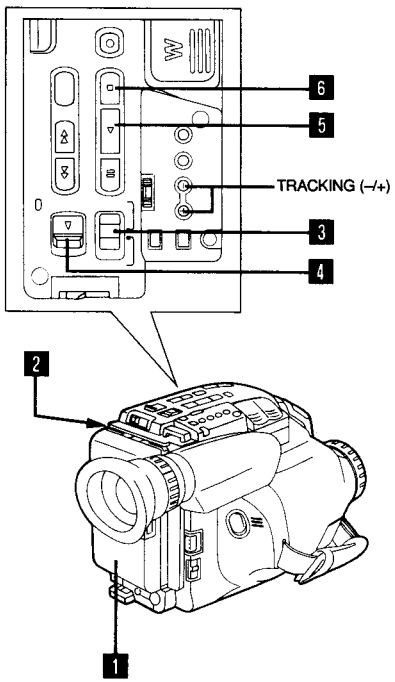
It is recommended to consult your nearest JVC dealer for replacing the bulb. However, if you wish to do it yourself, proceed as follows:

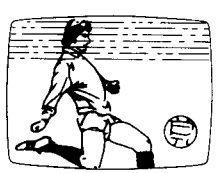
1. Turn and loosen the screw with a screwdriver.
2. Pull out the video light unit.
3. Turn the bulb unit counterclockwise to remove it.
4. Pull out the bulb.
5. Insert a new bulb. At this time, it is important to hold the bulb using a soft cloth. Do not touch the bulb directly.
6. Replace the bulb unit.
7. Reattach the video light unit and tighten the screw.

Notes:

- The video light unit and the bulb are very hot immediately after the power is turned off. Bulb replacement should be performed after it has cooled. (It will take approx. 30 minutes to cool sufficiently.)
- Do not touch the bulb directly. If it becomes dirty, smoke or reduced service life may result. When accidentally touched by fingers directly, wipe it with a soft cloth.
- Give the part number YQ20645-001 when ordering a video light bulb.
- Use the exclusive halogen bulb which is available at your nearest JVC dealer.

PLAYBACK





The VideoMovie permits playback of recorded "VHS-C" video cassettes.
For connections refer to pages 24 and 25.

PLAYBACK OPERATION

1. Preparations

1 Supply power. (Battery or AC operation: ☞ P.6 and 7.)
2 Insert a pre-recorded VHS-C cassette.
- Ensure that tape is not slack inside the cassette, then load the cassette correctly. ☞ P. 8.

2. To playback a cassette

3 Set PLAY/CAMERA to "PLAY".
4 Slide POWER to turn power on.
— The power indicator lights.
5 Press PLAY.
— Playback starts and playback picture appears on the viewfinder screen and connected TV.

3. To stop playback

6 Press STOP.
- After about 5 minutes in Stop mode, the VideoMovie switches itself off automatically.

REWIND OR FAST-FORWARD THE TAPE

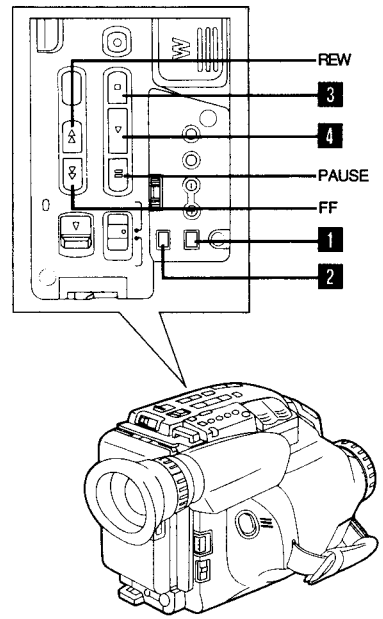
Rewind the tape:
Press REW less than about 2 seconds in the Stop mode.
Fast-forward the tape:
Press FF less than about 2 seconds in the Stop mode.
For high-speed REW or FF the tape:
Press REW or FF more than about 2 seconds and release it.
— The elapsed time counter changes to "-:--:--".
Note:
The elapsed time counter indication and counter memory function (☞P.23) do not function when using the high-speed REW or high-speed FF mode.

MANUAL TRACKING

If noise bars appear on the screen, the tracking needs to be adjusted.

1 Press either TRACKING to adjust to the best picture possible.
- When re-engaging the preset tracking standard, press both TRACKING (–/+) simultaneously.

Note:
For tapes recorded on another videocamera or VCR, tracking adjustment may not be effective.



STILL PLAYBACK

Press PAUSE during playback.
— The picture stops on the screen.
- After about 5 minutes of still playback, the VideoMovie enters the Stop mode automatically for tape protection and switches itself off.

SHUTTLE SEARCH

Fast-speed forward playback:
Press FF in the Play mode.
— Playback will be speeded up to 3 times normal speed.

Fast-speed reverse playback:
Press REW in the Play mode.
— The tape will be played back in the reverse direction at 3 times normal speed.

Notes:
- For brief fast-speed searching, keep FF or REW pressed for more than 2 seconds; when you release the button, the Search mode will be cancelled.
- Noise bars will appear and pictures may become monochrome while in Still Playback or Shuttle Search. This is not due to any defect of the unit.

COUNTER MEMORY FUNCTION

This VideoMovie incorporates a counter memory function which facilitates locating a specific tape segment.

1 Press C. RESET.
— Resets the counter to "0:00:00".
2 Press C. MEMORY. — "M" appears.
3 After recording or playback, press STOP, then REW.
— The tape will automatically stop at the counter reading of around "0:00:00".
4 Press PLAY. — Playback starts.

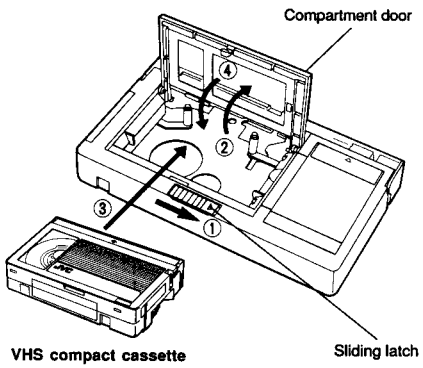
Notes:
- The counter memory function is effective in the Fast Forward mode as well.
- To cancel the memory function, press C. MEMORY so that "M" disappears.
- When the power supply unit is disconnected, the counter memory function is instantly cancelled.
- The counter memory function is not effective when using the high-speed FF or high-speed REW (☞ P.22).
- The counter memory function is not effective when the tape rewinds from the end: the VideoMovie automatically enters the high-speed REW mode, switching the counter indication to "-:--:--".

USING THE CASSETTE ADAPTER

By using the Cassette Adapter, a VHS-C video cassette recorded with this VideoMovie can be played back with any deck-type VHS video recorder. Also, a VHS-C video cassette installed in the cassette adapter is fully compatible for both recording and playback on any deck-type VHS video recorder.

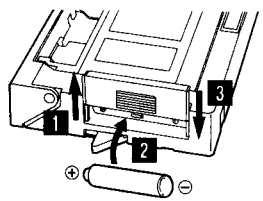
Note:
Only compact video cassette tapes marked VHSC can be used with the Cassette Adapter.

C-P6U Cassette Adapter
Being battery-operated, the C-P6U performs tape loading and unloading automatically.

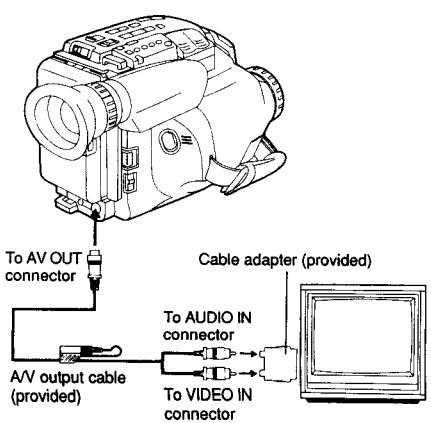


Note:
During special-effects playback (slow motion, still frame, etc.) the picture may vibrate or noise bars may appear on the screen.

Inserting the battery into the cassette adapter
1. Remove the battery cover by sliding it up.
2. Install one "R6" battery.
3. Reattach the cover.



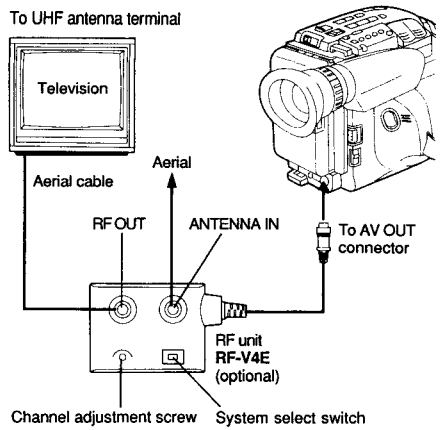
CONNECTIONS TO A TELEVISION FOR PLAYBACK



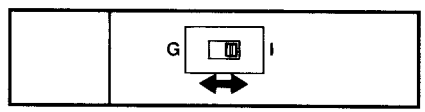
1 Connection to a television equipped with A/V input connector

For this situation, use the provided A/V output cable.

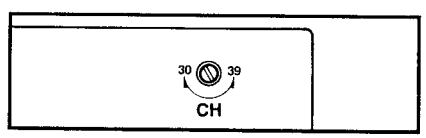
- Use the A/V output cable to simply connect the AV OUT connector of the VideoMovie to the AUDIO input and VIDEO input connectors of the TV.
- If your TV has the 21-pin AV input connector (SCART), use the provided cable adapter.
- Please also refer to the instruction manual of the TV you are connecting the VideoMovie to.



- **TV system select switch (I/G)**
  When you use a TV receiver built on the British PAL standard, shift the system select switch to "I".



- **RF converter channel adjustment screw**
  To make this adjustment, remove the small cap on the back of the RF unit and turn the adjustment screw with a screwdriver to tune in a vacant channel. The RF unit permits playback of video and audio recordings through a TV receiver. The signals from the RF unit are viewed through a vacant channel not used for broadcasting in your area. The output frequency of the RF converter has been set to correspond to a broadcast on UHF channel 36. To view playback pictures from the VideoMovie with your TV receiver, tune its specified AV channel to UHF channel 36. If channel 36 is employed for broadcasting in your area, readjust the RF converter output channel to one of the vacant channels between 30 and 39.



2 Connection to a television not equipped with A/V input connector

For this situation, use the optional RF unit.

1. Remove the aerial cable from the TV receiver.
2. Connect the aerial cable to the ANTENNA IN terminal of the RF unit.
3. Connect the RF OUT terminal of the RF unit to the aerial terminal of the TV receiver using the provided aerial cable.
4. Connect the VIDEO/AUDIO INPUT cable of the RF unit to the AV OUT connector of the VideoMovie.

PRECAUTIONS FOR RF UNIT
- For exclusive use with the VideoMovie.
- Do not disassemble or remodel the RF unit
- Do not expose it to strong shocks.
- Unplug the connected equipment during lightning storms. (Never touch the aerial cable.)

OPERATION
- **Viewing video cassettes being played back with the VideoMovie**
  To view video cassettes or to monitor the recording, set the TV channel selector to the channel corresponding to the RF output channel.
- **RF converter channel adjusting procedure**
  1. Set the AV channel of the TV receiver to one of the vacant channels.
  2. Power the VideoMovie.
  3. Put the VideoMovie in the Rehearsal mode (see page 11).
  4. While monitoring the output signal on the TV screen, turn the RF converter channel adjustment screw to that the monitored picture comes in most clearly.

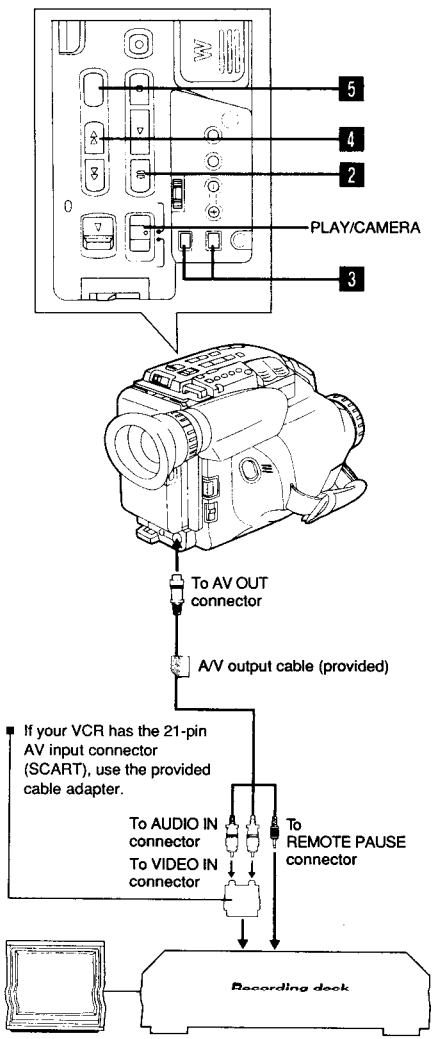
CAUTION:
To view the VideoMovie recordings with a TV receiver, use a TV receiver having a specified AV channel and employ this AV channel as your VIDEO CHANNEL, otherwise playback may be disturbed with vibrating or bending pictures. AV channels refer to channels exclusively for video playback; because AFC circuits are applied to these channels, the playback pictures can be stabilised. Recent TV receivers have one or more AV channels.

ENGLISH

EDITING TECHNIQUES

MASTER EDIT CONTROL SYSTEM (Assemble Editing)
(When using a JVC VCR equipped with a Remote Pause terminal)

This feature functions only when using a designated JVC VCR equipped with a Remote Pause terminal. The Master Edit Control system enables control of the VCR via the VideoMovie's controls, for quality preroll editing without transition-point gaps and distortion. Please refer to the VCR's instruction manual also.

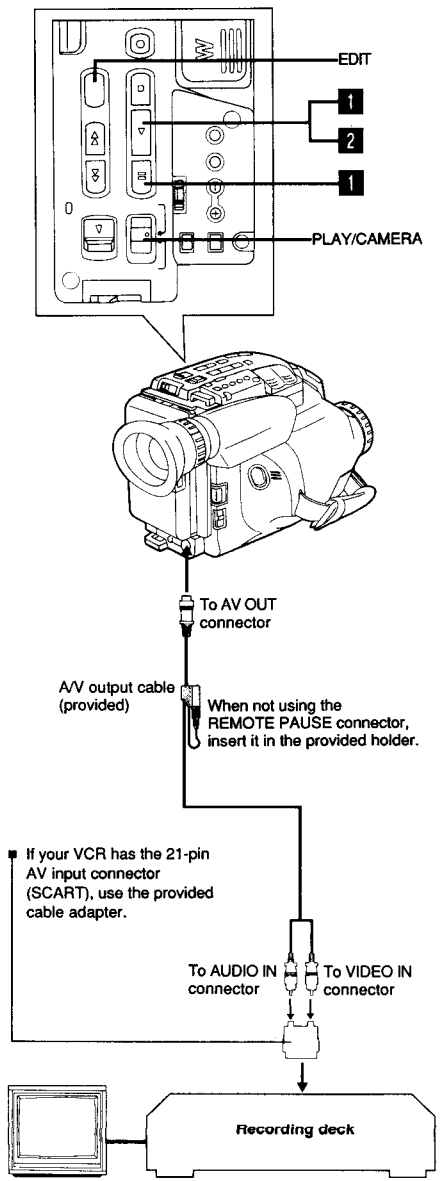


Preparation

- Connect the VideoMovie and the recording deck as in the diagram on the left.
- Turn on both the VideoMovie and the recording deck.
- Correctly insert the appropriate cassettes into the VideoMovie and the recording deck.
- Set PLAY/CAMERA to "PLAY".

1. Engage the recording deck's AUX(iliary) mode and Record-Pause mode.
   — The tape in the deck winds backward for 1.3 seconds.
2. Engage the VideoMovie's Play mode to locate the edit-out point on the tape. When this point is reached, press PAUSE.
3. Press C. RESET, then C. MEMORY.
   — "M 0:00:00" appears.
4. Press REW to locate the edit-in point. When it is reached, engage the Still mode.
5. Press EDIT to start editing.
   - The VideoMovie and the recording deck carry out the following procedure automatically.
     1) The VideoMovie prerolls the tape for 5 seconds then starts playback to stabilize the tape run.
     2) After the VideoMovie has played back for 3.7 seconds, it sends a command signal to the recording deck. The deck then starts playback together with the VideoMovie for 1.3 seconds.
     3) When the VideoMovie's tape reaches the edit-in point, the deck starts recording in synchronization with it.
6. When the VideoMovie's tape reaches the edit-out point (counter reading of "0:00:00"), the VideoMovie enters the Still mode and the recording deck enters in the Record-Pause mode automatically.
   - Repeat these steps as required.
   - When the tape reaches the preset edit-out point during the dubbing operation, it may stop slightly before or after the designated point on the tape.

Note:
There are some VCRs which are not compatible with the Master Edit Control system.


EDIT
1
2
1
PLAY/CAMERA
To AV OUT connector
A/V output cable (provided)
When not using the REMOTE PAUSE connector, insert it in the provided holder.
■ If your VCR has the 21-pin AV input connector (SCART), use the provided cable adapter.
To AUDIO IN connector
To VIDEO IN connector
Recording deck

TAPE DUBBING
(Dubbing to a second recorder)

In order to perform simple dubbing of an entire tape, proceed as follows. Please refer to the VCR's instruction manual also.

Preparations

- Make connections according to the diagram on the left.
- Turn on all components' power.
- Correctly insert the appropriate cassettes.
- Set PLAY/CAMERA to "PLAY".

1. Engage the connected recorder's AUX(iliary) mode and Record-Pause mode, and press the VideoMovie's PLAY and PAUSE together to engage its Pause mode.
2. Press the VideoMovie's PLAY and engage the connected recorder's Recording mode to start dubbing.
   — The VideoMovie starts playback; the recorder starts recording.
3. To edit out unwanted material, engage the recorder's Record-Pause mode.
   - If using with a JVC VCR equipped with a Remote Pause terminal, perform as follows:
     1) Make connections according to the diagram on the page 26.
     2) Engage the connected recorder's AUX(iliary) mode and Record-Pause mode.
     3) Press EDIT of the VideoMovie. The deck's recording begins in synchronization with the VideoMovie's playback start.

ENGLISH

USING THE PROVIDED REMOTE CONTROL UNIT

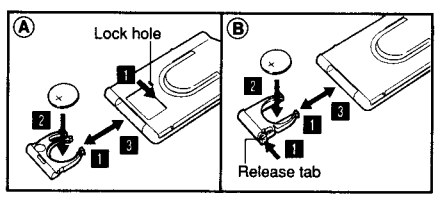
The RM-V704U Full-Function MBR (Multi-brand Remote) can operate this VideoMovie from a distance as well as the basic operations (PLAY, STOP, PAUSE, FF, and REW) of your VCR. This remote control unit is useful when dubbing from the VideoMovie to your VCR, and it makes additional recording functions possible.

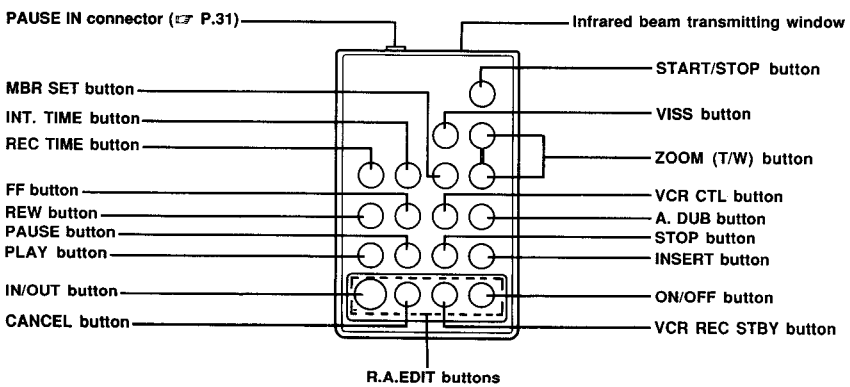
- Install a battery before using the remote control unit.
- Functions of the remote control unit's control buttons vary depending on the PLAY/CAMERA switch position.

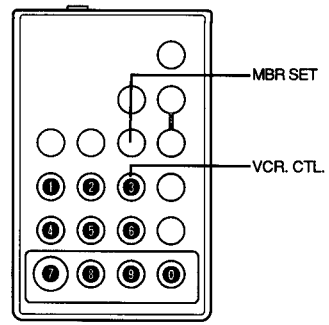
Buttons	Functions	
	With the VideoMovie's PLAY/CAMERA set to "CAMERA".	With the VideoMovie's PLAY/CAMERA set to "PLAY".
START/STOP	Functions same as the Recording Start/Stop button of the VideoMovie.	—
ZOOM(T/W)	Functions same as zoom T/W of the VideoMovie	—
VISS	Index code marking (☞ P.32)	—
REC TIME	Animation/Time lapse (☞ P.33)	—
INT. TIME	Self-Timer/Time lapse (☞ P.32, 33)	—
REW	Retake (Rewind)	Rew/Rew Shuttle Search
FF	Retake (Forward)	FF/FF Shuttle Search
PLAY	—	Playback start
PAUSE	—	Pause
STOP	—	Stop
A. DUB	—	Audio dubbing (☞ P.35)
INSERT	—	Insert Editing (☞ P.34)
R. A. EDIT	—	☞ P.30

Inserting the battery

1. Pull out the battery holder according to the type of remote control unit you have.
   Type Ⓐ : Pull out the battery holder while sliding the lock hole with a pointed instrument.
   Type Ⓑ : Pinch the release tab and pull out the battery holder.
2. Insert the lithium battery (CR2025), with its plus (+) side up, into the battery holder.
3. Replace the battery holder until it clicks in place.
   *Read warning on lithium battery. (☞ P. 2)







VCR CODE LIST

VCR BRAND NAME	BUTTONS (A) (B)
AKAI	5 5 5 4 7 7
BLAUPUNKT	1 1
FERGUSON	3 3 3 4 3 8
GRUNDIG	3 4 4 4
HITACHI	5 5 5 8
JVC A B C	3 1 3 5 3 8
MITSUBISHI	5 7 5 4
NEC	3 3 3 5
PANASONIC	1 1 1 6 1 1 2 2 4 8

VCR BRAND NAME	BUTTONS (A) (B)
PHILIPS	1 1 3 5 1 6 5 4 3 6 3 6 1 2 5 6
SANYO	5 6 5 5
SELECO, REX	4 1 5 2
SHARP	5 5 5 5
SONY	5 5 5 6 5 5 5 1
THOMSON, TELEFUNKEN, SABA, NORDMENDE	5 1 5 5 5 7 5 6
TOSHIBA	5 5 5 1

IMPORTANT:
Although the MBR (Multi-Brand Remote Control) is compatible with JVC VCRs, as well as many VCR models manufactured by others, it is possible that this remote control will not work with your VCR or may offer limited functions.

ENGLISH

A. To operate the VideoMovie

1. Turn the VideoMovie's power ON.
2. Press the button corresponding to the function you want to operate.

B. To operate your VCR

1 To set the remote control unit to correspond to the brand of your VCR:

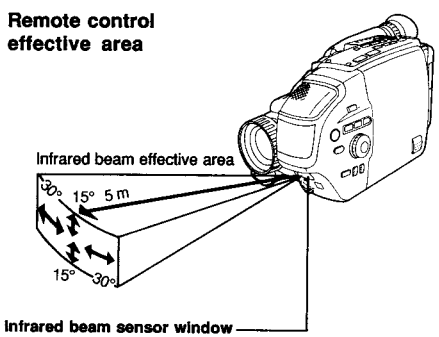
Turn the VCR's power off before starting.

1. Point the remote control toward the VCR's infrared beam sensor window.
2. Refer to the list on the left, and while pressing MBR SET, press button (A), then press button (B).
3. Release MBR SET.
   - The code is set and the VCR's power automatically comes on.
     If your VCR has more than one code, choose the code with which you can turn the VCR's power on.
     (With some VCR brands, power won't come on automatically. In this case, turn the VCR power on manually and check to see if the remote control buttons work with the VCR.)

2 To operate the VCR:

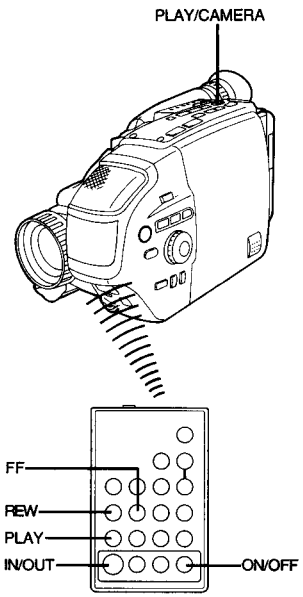
1. Turn the VCR's power ON.
2. Press the button on the remote control unit corresponding to the function you want to operate while pressing VCR CTL.
   - Since the remote control unit has a number of operation codes, determine the appropriate code for operating your VCR by confirming correct VCR operations according to the steps above.
   - The VCR functions that the RM-V704U can control are PLAY, STOP, PAUSE, FF, REW and VCR REC STBY. Among them, VCR REC STBY button doesn't need to be pressed along with VCR CTL.
   - If the RM-V704U is not able to control the VCR, use the controls on the VCR.

Remote control effective area



Infrared beam sensor window
Receives the transmitted beam signal.
*The transmitted beam may not be effective or may cause misoperations when the infrared beam sensor window is directly exposed to sunlight or powerful lighting.

USING THE PROVIDED REMOTE CONTROL UNIT (Cont'd)



	IN	OUT
►1	0:00:25	
2		
3		
4		
5		
6		
7		
8		
COUNTER	0:00:25	
TOTAL	0:00:00	

	IN	OUT
1	0:00:25	0:01:05
2	0:03:18	0:03:31
3	0:02:33	0:02:53
►4	0:04:11	
5		
6		
7		
8		
COUNTER	0:04:11	
TOTAL	0:01:19	

RANDOM ASSEMBLE EDITING

The RM-V704U remote control unit offers a feature called Random Assemble Editing (R. A. Edit) which lets you pre-select up to 8 scenes to be automatically edited to a VCR. (The VCR must be controllable using this remote control, ☞ P.29).

Preparations:

- Connect the VideoMovie and the recording deck as per the diagram on the right (P.31). (Do not connect [A] or [B] yet.)
- VideoMovie: Correctly insert a recorded tape and set PLAY/CAMERA to "PLAY".
- VCR: Turn power on. Insert a recordable tape, and set to the AUX(iliary) mode. Refer to VCR's manual for details.

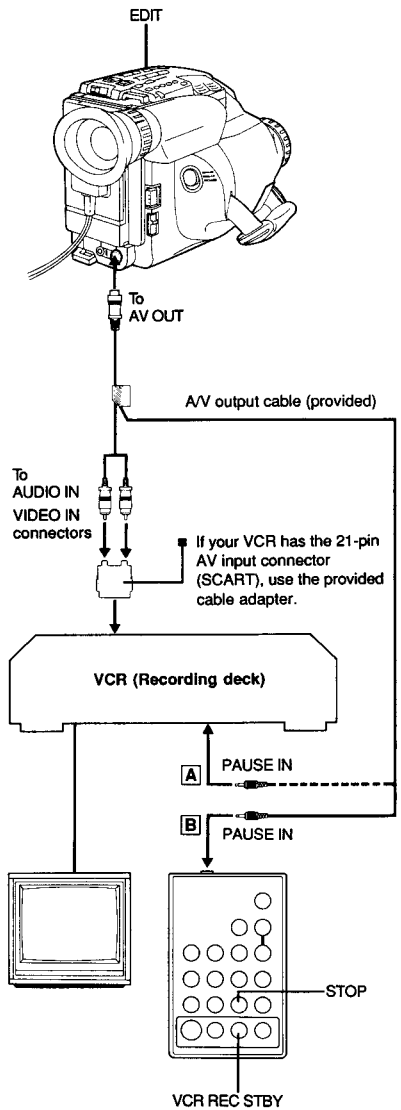
To select up to 8 scenes

1. Point the remote control toward the VideoMovie's infrared beam sensor window and press ON/OFF.
   - The R. A. Edit counter display will appear in the viewfinder.
2. Press PLAY.
   - The R. A. Edit counter display will appear on the TV screen.
3. Use FF or REW to search for the beginning of a scene you want, press IN/OUT.
   - The in-point's counter reading is registered on the display.
4. Use FF or REW to search for the end of the scene you want, press IN/OUT again.
   - The out-point's counter reading is registered on the display.
   - The "TOTAL" reading shows the total running time of the edited scenes.
5. Specify additional scenes by repeating steps 3 – 4.

Notes:

- For any scene, the out-point must have a counter reading that is at least 1 second after the in-point. An out-point with a counter reading less than or the same as the in-point will not be registered.
- Since the VideoMovie prerolls during R. A. Edit, there must be at least 15 seconds worth of recording material prior to any in-point on the playback tape.
- Blank portions of tape cannot be registered as in- or out-points.
- If the search time for an in-point exceeds 5 minutes, the recording deck's Record-Pause mode will be cancelled and editing will not take place.
- Pressing the ON/OFF button will clear all in- and out-points from memory.
- Do not press C. RESET during or after selecting the in/out points; this will reset the counter and cause R.A. Edit to function improperly.
- When editing, a slight discrepancy between the counter reading and actual in- and out-points may occur. Please position your in- and out-points with enough leeway so that segments will be recorded in their entirety (not cut off).

(Continued on next page.)



To make corrections

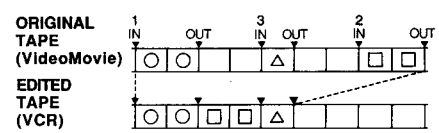
During steps 3 and 4 on the previous page, pressing CANCEL will erase the last in- or out-point. Pressing again will erase the point before that, and so on.

For automatic editing to a VCR

[A] If the recording deck is the JVC VCR that has a Remote Pause terminal, connect the A/V output cable's PAUSE connector to it.
[B] If the VCR does not have a Remote Pause terminal, connect the cable's PAUSE connector to the remote control's PAUSE IN jack.

1. Point the remote control toward the VCR's infrared sensor window and press VCR REC STBY.
   - Be sure that the VCR enters the Record-Pause mode. If not, use the controls on the VCR to enter the Record-Pause mode.

   Note:
   With some manufacturer's VCR's, pressing VCR REC STBY may not place the VCR into the Record-Pause mode.
2. Press the VideoMovie's EDIT.
   - The function begins automatic editing; all the scenes are copied to the VCR in the specified order.
   - Keep the remote control pointed toward the VCR's remote sensor window.
   - The on-screen display remains superimposed while the VideoMovie searches for each scene (the blinking cursor points to the scene number presently being searched), and is not displayed while the scenes are being edited.
   - When R. A. Edit is finished, the VideoMovie enters the Still mode and the VCR enters the Record-Pause mode. Press STOP on both units to end R. A. Edit.



To dub the entire tape without any edits

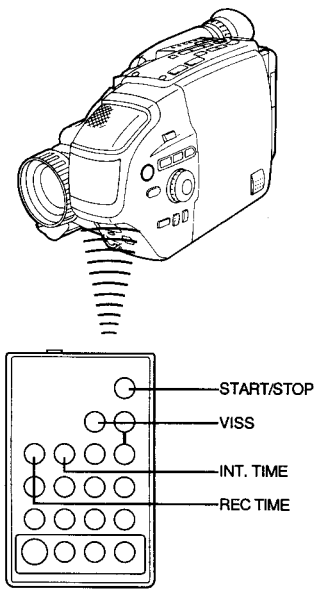
To make a duplicate copy of the VideoMovie's tape, perform R. A. Edit by specifying only one in-point (and no out-point). R. A. Edit will automatically dub everything from that in-point to the end of the tape.

Note:
With some VCR models, there may be noise at the in- or out-points on the edited tape.

ENGLISH

USING THE PROVIDED REMOTE CONTROL UNIT (Cont'd)

Viewfinder



INDEX CODE MARKING

The VHS Index Search System (VISS) gives you automatic access to any point you select on a recording. Only the marking aspect of the Index Search System is included in this unit. It allows index codes to be placed on recorded tape for convenient dubbing or editing on VCRs with an Index Search function.

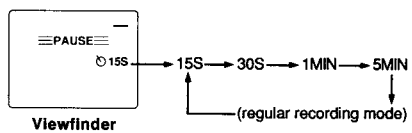
1. Press VISS once to put an index code onto the tape.
   — "INDEX" blinks during the marking process.

- When "INDEX" appears, no VideoMovie functions can be executed.
- If VISS has been pressed in the Record-Pause mode, an index code is put at the point where START/STOP is pressed.

SELF-TIMER

This Self-Timer function allows you to set the amount of time delay before recording starts after START/STOP has been pressed. If the VideoMovie has been secured, the operator can enter the picture before actual recording begins.

1. Put the VideoMovie into the Record-Pause mode.
2. Press INT. TIME to select the interval time.
   — The following sequence of time setting is displayed with each press of INT. TIME:



Viewfinder

- If the VideoMovie's SELF-TIMER is pressed, the 15S mode will be selected.

3. Press START/STOP.
   - When the selected time has elapsed, recording begins automatically.
   - When performing Self-Timer shooting, the tally lamp will start blinking approximately 10 seconds before the actual recording begins. Then when recording starts, the lamp lights normally to indicate recording is in progress.

To release the Self-Timer mode:

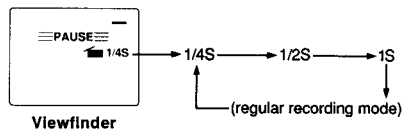
When "–" is not blinking:
Press INT. TIME continuously until " ⏲ " goes off.
When "–" is blinking:
Press START/STOP to stop the blinking, then press INT. TIME continuously until " ⏲ " goes off.

- Turning the power off and on once engages the regular Record-Pause mode.

ANIMATION

The Animation function produces the illusion of movement in otherwise stationary scenes or objects. This technique is accomplished by shooting a series of slightly different pictures of the same scene or slightly different poses of the same object for a brief period of time.

1. Put the VideoMovie in the Record-Pause mode.
2. Press REC TIME to select the recording time.
   — The following sequence of time setting is displayed with each press of REC TIME:



Viewfinder

- If the VideoMovie's SELF-TIMER is pressed, Animation will be cancelled and the VideoMovie will enter the Self-Timer 15S mode.

3. Press START/STOP after focusing on the subject.
   - Recording stops automatically in the Record-Pause mode after the selected period of time.
4. Repeat steps 2 - 3 for the required number of pictures.
5. Playback the recorded series to check if results were satisfactory.

To release the Animation mode:

Press REC TIME until " " in the viewfinder disappears, or set PLAY/CAMERA to "PLAY".

- The Animation mode can only be engaged from the Record-Pause mode.

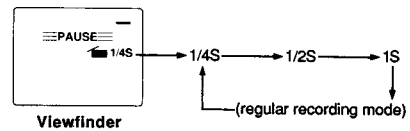
Notes:

- Keep the VideoMovie steady in one position when filming the series of shots for best results. Mounting the VideoMovie on a tripod is recommended.
- Before recording in the Animation mode at the very beginning of a tape, set the VideoMovie to the Recording mode for about 5 seconds, so that the tape runs smoothly. Using the Fade-in function at this point is a good way to begin an animated programme.
- Fade-in/out is not possible while the Animation or Time-Lapse shooting.
- When shooting in the Animation mode, the elapsed time counter reading may be incorrect. This is not due to any defect of the unit.

TIME-LAPSE

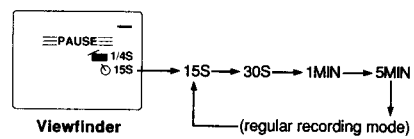
The Time-Lapse function allows automatic sequential on/off recording at preset time spans. With the VideoMovie continuously focused on a specific scene or object, the resulting recording will show subtle changes (such as shifts in cloud formations, plant growth etc.) over an extended period of time.

1. Put the VideoMovie into the Record-Pause mode.
2. Press REC TIME to select the recording time.
   — The following sequence of time settings is displayed with each press of REC TIME:



Viewfinder

3. Press INT. TIME to select the interval time.
   — The following sequence of time settings is displayed with each press of INT. TIME:



Viewfinder

4. Press START/STOP to start the Time-Lapse recording. The selected recording time and interval will alternate automatically.
   - The tally lamp functions in the same way as in Self-Timer shooting.

To release the Time-Lapse mode:

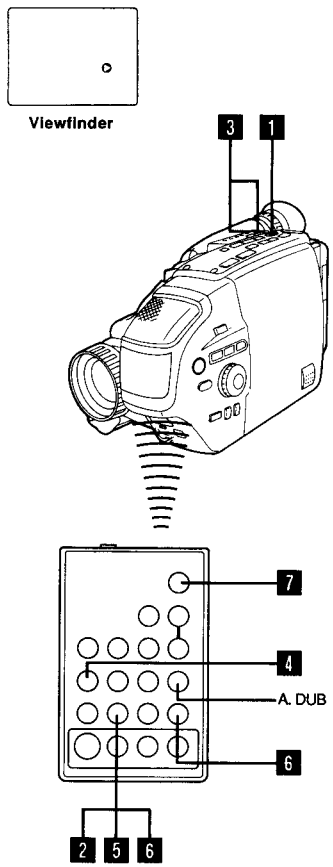
When "–" is not blinking:
Press INT. TIME and REC TIME continuously until " " and " ⏲ " go off.
When "–" is blinking:
Press START/STOP to stop the blinking, then press the INT. TIME and REC TIME continuously until " " and " ⏲ " go off.

Notes:

- When shooting in the Time-Lapse mode, the elapsed time counter reading may be incorrect. This is not due to any defect of the unit.
- During steps 2 or 3, if the VideoMovie's SELF-TIMER is pressed, the Self-Timer 15S mode will be engaged.

ENGLISH

USING THE PROVIDED REMOTE CONTROL UNIT (Cont'd)



INSERT EDITING

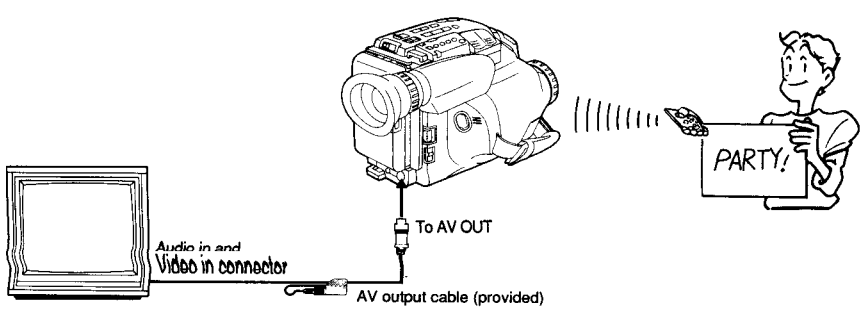
Insert editing means recording a new scene into a section of prerecorded tape so that a part of the original recording can be replaced with a new sequence without excessive picture distortion at the edit-in and edit-out points. In the Insert Editing mode, the original audio on the audio track remains unchanged.

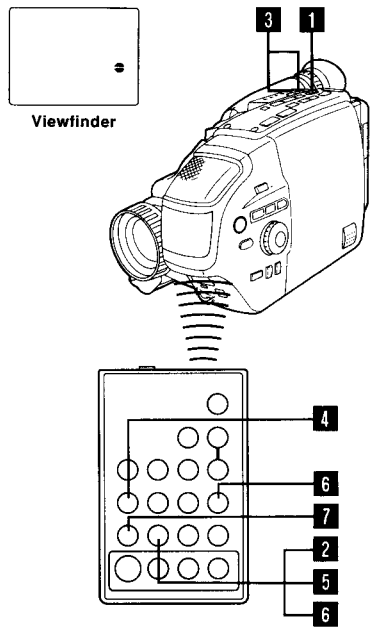
1. Set PLAY/CAMERA to "PLAY".
2. Locate the desired edit-out point on the tape and press PAUSE.
3. Press C. RESET, then C. MEMORY to obtain the "M" indication in the viewfinder.
4. Press REW to rewind the tape a little beyond the beginning of the scene you wish to insert.
5. Press PAUSE exactly at the beginning of the scene to insert.
6. While holding INSERT pressed, press PAUSE.
   — The VideoMovie enters the Insert Editing mode with the scene at which the VideoMovie is aimed appearing on the screen for monitoring.
7. Press START/STOP to insert the new sequence.

■ When the counter reading of "0:00:00" is reached, insert editing stops automatically and the VideoMovie enters the Playback mode.

Notes:

- When in the Still mode, the counter indication may be blurred. This is normal.
- When the tape reaches the preset edit-out point during the editing operation, it may stop slightly before or after the designated point on the tape. Also, at that time, noise bars may appear momentarily. Neither of these is a defect of the unit.
- Only video signals are recorded in the Insert Editing mode. When the sound is to be recorded, press the A. DUB and PAUSE simultaneously in the Insert Pause mode. When INSERT and PAUSE are pressed simultaneously again, the unit re-enters the Video-signal-only Recording mode.





AUDIO DUBBING

Audio dubbing means recording a new soundtrack on a pre-recorded tape, i.e., replacing the original sound with new audio material.

Precautions

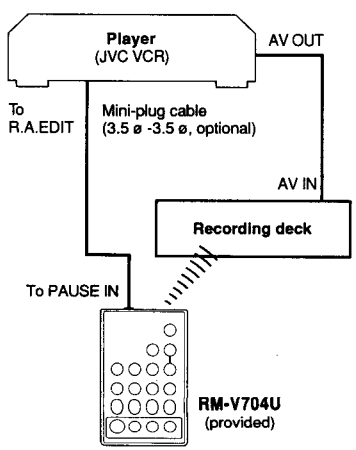
- Tapes with their safety tabs removed cannot be audio dubbed. Reseal the safety tab slot to perform the dubbing.
- If whistling or howling is heard during audio dubbing, reduce the TV volume or move the mike farther away from the TV.

1. Set PLAY/CAMERA to "PLAY".
2. Locate the desired edit-out point on the tape and press PAUSE.
3. Press C. RESET, then C. MEMORY to obtain the "M" indication in the viewfinder.
4. Press REW to locate more quickly the place on the tape you want to begin.
5. Press PAUSE at the exact beginning point.
6. While pressing A. DUB, press PAUSE to enter the Audio Dub Standby mode.
7. Press PLAY. — Audio dubbing begins.

■ When the counter reading of "0:00:00" is reached, audio dubbing stops automatically and the VideoMovie enters the Playback mode.

ENGLISH

SUPPLEMENTAL INFORMATION ON THE PROVIDED REMOTE CONTROL



Using the provided RM-V704U remote control, it is also possible to perform deck-to-deck Random Assemble Editing. The playback deck must be an R.A. Edit-capable JVC VCR. The recording deck can be...

- a VCR other than JVC, or
- a JVC VCR which does not have a Remote Pause terminal.

How to use:

— Connect the playback deck and RM-V704U as shown on the left.
— Set the RM-V704U to correspond to the brand of the recording deck. (☞ P. 29)
— For Random Assemble Editing procedure, please refer to the instruction manual of the JVC VCR you are using as the playback deck.

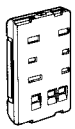
Notes:

- RM-V704U cannot be used to control the playback deck.
- RM-V704U is capable of controling basic operations of the recording deck. While pressing VCR CTL, press PLAY, STOP, PAUSE, FF or REW for these functions. (Not possible with some brands and models). Other buttons cannot be used.
- To put the recording deck in the Record-Pause mode, use the controls on the recording deck itself.

SYSTEMS FLEXIBILITY

For maximum enjoyment, make the most of the provided or optional accessories depending on the situation.

■ **Battery pack**
BN-V12U
BN-V14U
BN-V22U
BN-V50U
BN-V60U

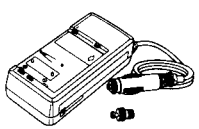


*Recording time ☞ P. 6

■ **AC power adapter/battery charger AA-V11EG**
Charges or discharges battery pack or powers the VideoMovie via household AC current. (Can be used with 110 V to 240 V.)

*Charging time ☞ P. 6

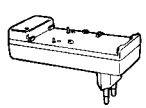
■ **Car battery charger BH-V3E***
Charges battery pack or powers the VideoMovie via a car battery. (Use with 12 V or 24 V nagative grounded cars only.)



*Charging time

BN-V12U	Approx. 50 min.
BN-V14U	Approx. 55 min.
BN-V22U	Approx. 90 min.
BN-V60U	Approx. 90 min.

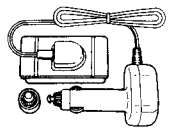
■ **Battery charger BH-VC10EG***
Use to charge the battery pack.



*Charging time

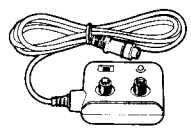
BN-V12U	Approx. 7 hour
BN-V14U	Approx. 8 hour
BN-V22U	Approx. 13 hour
BN-V60U	Approx. 13 hour

■ **Car battery cord AP-V6E/V7E**
Power the VideoMovie via a car battery. (Use with 12 V negative grounded cars only.)



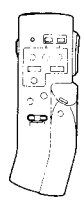
*Cable length: 2 m

■ **RF unit RF-V4E**
Use to connect the VideoMovie to a regular television for playback.



*Cable length: 1.5 m

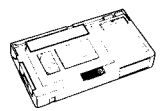
■ **Wired remote control unit RM-V20U**
Controls VideoMovie's functions (POWER ON/OFF, REW, FF, STOP, PLAY, PAUSE, INSERT, AUDIO DUB, REC TIME, INTERVAL, VISS, START/STOP, ZOOM T/W) from a distance, and from any direction.



*Cable length: 3 m

■ **Compact VHS (VHS-C) cassettes EC-45/30**
Allows 45/30 minutes of VHS recording and playback respectively.

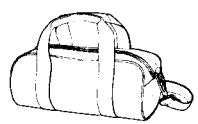
■ **Cassette adapter C-P6U**
Enables the VHS-C cassette to be used with regular VHS machines.



■ **Conversion lens kit GL-V10U**
Offers telephoto (1.4x) and wide-angle (0.6x) conversion.

■ **Shoulder strap VU-V220U**

■ **Active carrying bag CB-V7U**



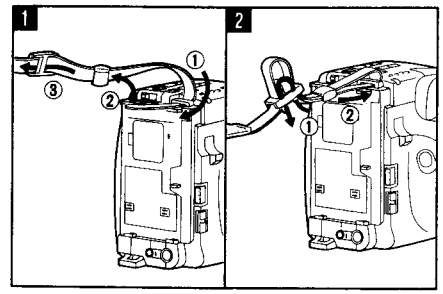
*Dimensions (WxHxD):
340 x 170 x 155 mm

*The BN-V50U battery pack is not rechargeable with the BH-V3E and the BH-VC10EG.

*The VC-V8961SE A/V output cable is not usable with the GR-AX75EG. Use the provided A/V output cable or the optional VC-V896E. (R.A. Edit is not possible with the VC-V896E.)

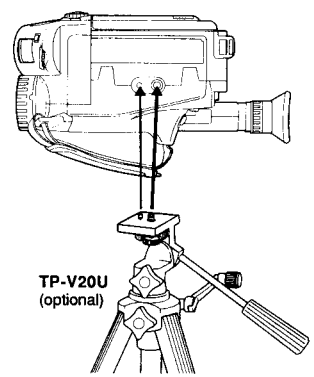
Some accessories are not available in some areas.

USING ACCESSORIES



ATTACHING THE SHOULDER STRAP

1. Loop the end of the strap over the top of the eyelet ①, then, folding it back, thread the end of the strap first through the keeper ②, then the buckle ③. Making sure that the strap is not twisted, repeat the above procedure to attach the other end of the strap to the other eyelet.
2. Adjust the shoulder strap to the desired length ①, then slide both keepers up snug against the eyelets to prevent the strap from slipping ②.



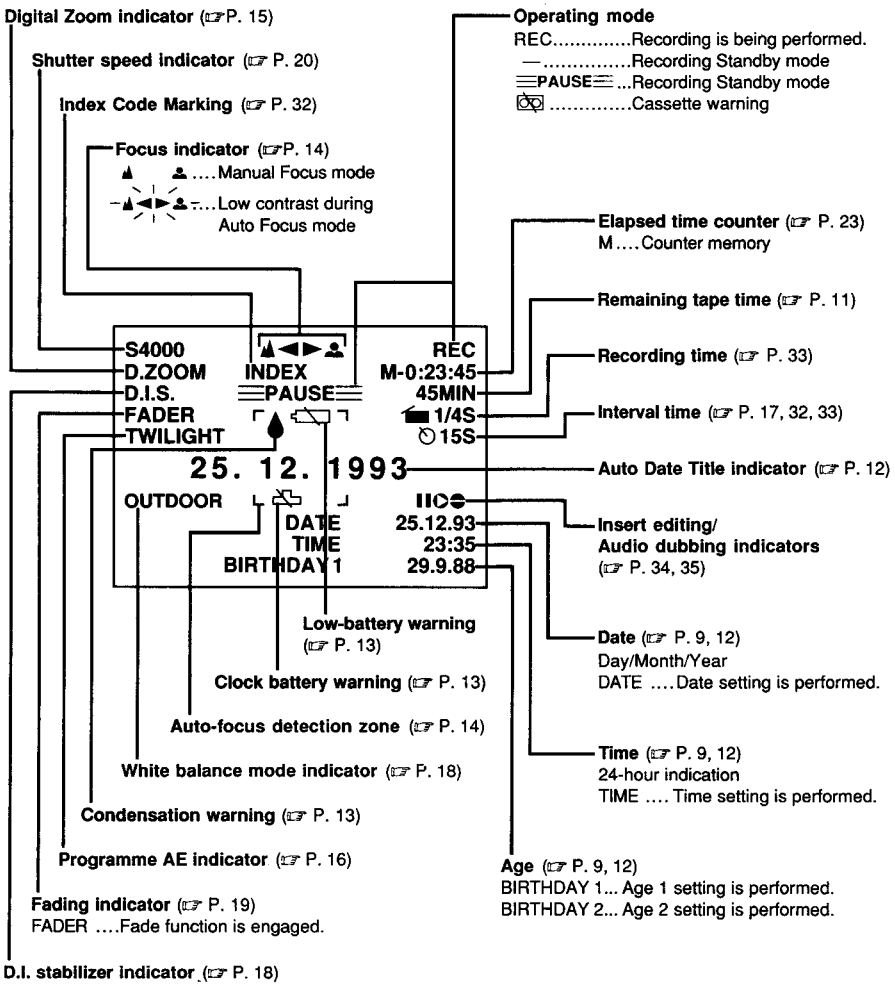
TP-V20U
(optional)

TRIPOD MOUNTING

Align the screw and camera direction stud of the tripod with the camera's tripod mounting socket and stud hole, and firmly tighten the screw.

ENGLISH

VIEWFINDER INDICATIONS



ON-SCREEN DISPLAY

The viewfinder indications can also be displayed on the screen of a monitor connected to the VideoMovie.

- Connect the VideoMovie to a video monitor. Press MODE to select the On-Screen Display mode. The viewfinder indications appear on the monitor screen. (☞ P. 12.)
- *In the On-Screen Display mode, Date/Age will be displayed.*
- *The on-screen display is available in the Rehearsal or Record-Pause mode.*

HELPFUL TERMS AND INFORMATION

The following glossary is for your convenience in helping you better understand your VideoMovie and its operation.

AGC (Auto Gain Control):
Automatically increases camera sensitivity when the illumination falls below a certain level.

Age insertion:
Permits recording of the age of a subject while shooting live events. Ideal for chronicling events like anniversaries, birthdays, etc.

Animation:
By shooting the same inanimate subject repeatedly with slight variations each time, the illusion of motion can be created.

Audio dubbing:
Allows you to replace only the linear audio portion in a previously recorded scene (for adding narration, etc.).

AUX mode:
Refers to Auxiliary mode. When the VideoMovie is connected to a VCR for editing or dubbing, the VCR should be set to this mode.

AV:
Short for Audio/Video. Often refers to the audio (sound) and video (picture) signals which, when combined, make up a programme.

CCD (Charge Coupled Device):
Solid-state imaging device used in VideoMovies as the camera's image pickup; analogous to the eye's retina except that picture information is output as electric signals.

Cinema mode:
"Letterboxes" live recordings (blacks out the top and bottom of the screen) to give scenes recorded on a VideoMovie a "wide screen" effect.

Colour temperature:
A measurement in Kelvin degrees which indicates the colour contents of a light source; bluish light has a higher colour temperature than reddish light. To reproduce white as white under different types of lighting, the chrominance signal must be adjusted to match the light source's colour temperature. (See "White balance".)

D.I. Stabilizer (Digital Image Stabilizer):
This function compensates for the effects of camera-shake which can become particularly noticeable at high zoom ratios.

Digital zoom:
This function offers double the magnification of normal zoom. (Maximum approx. 20x).

Exposure Control:
This feature lets you adjust the camera's iris to fine-tune a scene's brightness as you like.

Head:
An electronic component which "writes" or "reads" video signals on the tape.

High-speed shutter:
Normally the CCD transmits picture information every 1/50 second. A high-speed shutter makes it possible to use only a small portion of electric charges accumulated in each 1/50 segment, to reduce picture blur, or to obtain crystal-clear stills of moving objects in playback on a VCR equipped with Still or Slow Motion mode.

HQ (High Quality):
An enhancement feature in the VCR circuitry which provides greater picture detail.

Lithium battery:
Necessary for VideoMovie's clock and date/time/age settings, and for use of the RM-V704U Remote Control Unit. Use only Panasonic (Matsushita Electric) CR2025.

Master Edit Control:
Lets a VideoMovie control the starting and stopping of a VCR during editing for accurate, synchronized editing at the touch of a single button.

On-screen display:
The viewfinder indications can also be displayed on the screen of a monitor or TV that's connected to the VideoMovie.

Programme AE with Special Effects:
A variety of creative shooting effects (Portrait, Twilight, Monotone, etc.) are accessible.

Quick review:
Permits reviewing of the final part of the last recorded segment in the Record-Pause mode.

R.A.Edit (Random Assemble Editing):
This feature lets you pre-select up to 8 scenes to be automatically rearranged and edited to a connected VCR.

Refresh:
A feature on the AC power adapter that lets you completely discharge the power from the battery pack before charging again. Contributes to longer battery life.

Retake:
Permits forward or reverse search in the Record-Pause mode for easy re-recording.

Self-timer:
Enables a VideoMovie to automatically start recording after a selected delay time so the operator can enter the picture before actual recording begins.

Time-lapse:
Permits automatic on/off sequential recording at preset intervals. Used to capture changes over long periods of time.

Tracking:
A mechanism enabling the tracking position to be adjusted during playback so that the heads can accurately pick up the recorded signal in the best condition.

Tally lamp:
Lights to show that recording is in progress.

VCR:
Short for Video Cassette Recorder.

White balance:
A term that refers to the correctness of color reproduction under various lighting. If the white balance is correct, all other colours will also be accurately reproduced.

CAUTIONS

For safety, strictly observe the following instructions.

- Do not open the VideoMovie's chassis.
- Prevent inflammables, water and metallic objects from entering the unit.
- Do not disassemble or modify the unit.
- Do not use the unit when there is lightning in the vicinity. Disconnect the power cable of connected equipment.

Avoid using the unit under the following conditions:

- Places subject to excessive humidity or dust.
- Near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
- Places subject to soot or steam such as near a cooking stove.
- Places subject to excessive shock or vibration.
- Near a television set (rolling pictures or howling might result).
- Extremely hot places.

Do not expose the unit to high temperatures over 40°C for long periods.

If the unit should be subjected to direct sunlight, or left in a closed car in summer, or placed near a heater, the CCD and the auto-focus sensor may deteriorate and the cabinet may become deformed. Furthermore, this also may cause the transistors and other electronic and mechanical parts to malfunction. Remember the following:

- Do not leave the unit in places of over 50°C
- Do not use the unit in places of over 40°C
- Do not use the unit in places of below 0°C
- Protect the unit from excessively dry or humid conditions (below 35% or above 80% humidity).
- For long storage, select a place between –20°C and 30°C

Take special care for protection of the unit.

- Do not allow the unit to become wet.
- Do not leave the unit in closed cars on hot summer days.
- Take special care not to drop the unit or strike it against hard objects. Protect from shocks during transportation.

Be careful when using the video light.

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the VideoMovie into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.

Make it a rule to observe the following instructions.

- Do not remove the battery pack or disconnect other power supply units during recording or playback before setting the power switch to OFF. If not observed, this will cause tape damage and misoperation.
- When the unit is not in use, remove the battery pack.

Always keep the lens and viewfinder eyepiece clean.

- When the lens is dirty or dusty, blow it with a blower brush and then gently wipe with lens cleaning paper.
- Mold may form if the lens is left dirty.

Be careful not to damage the CCD.

- Do not keep the lens directed at extremely bright objects such as the sun or other light sources for long periods. Although the CCD is less susceptible to such burn than a tube would be, caution should be exercised when using this unit. Most importantly, the lens should be capped except while actually shooting.
- Do not direct the eyepiece of the viewfinder at the sun.

Handle the unit carefully.

- Protect the microphone from excessive shocks.
- Do not carry the unit by holding it only by the viewfinder.

Moisture condensation.

- You have observed that pouring a cold liquid into a glass will cause drops of water to form on the glass's outer surface. This same phenomenon occurs on the head drum of a VideoMovie when it is moved from a cool place to a warm place, after heating a cold room, under extremely humid conditions or in a place directly subjected to the cool air from an air conditioner.
- Moisture on the head drum can cause severe damage to the video tape, and can lead to internal damage to the VideoMovie itself.
- If moisture condensation occurs on the head drum, a condensation warning appears in the viewfinder and the unit enters the Stop mode, unable to function. In such a case, wait for a few hours until the indicator disappears.

Maintenance

- When the VideoMovie's exterior is dusty, clean it by gently wiping with a soft cloth.
- Avoid using of strong cleaning agents such as benzine or alcohol as they may damage the exterior.
- Cleaning should be done only after the battery pack has been removed or other power units have been disconnected.

Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

General Battery Precautions

- When the RM-V20U/C-P6U is not functioning even when correctly operated, the batteries are exhausted. Repalce them with fresh batteries.
- Use only following batteries in the unit.
  RM-V20U .....R03 (AAA) size
  C-P6U.....R6 (AA) size

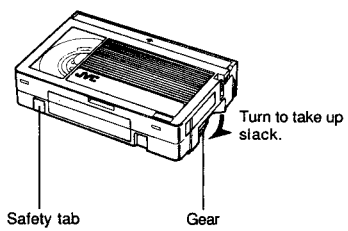
Please make note of the followiing rules for battery use. When misused, batteries can leak or explode.

1. Insert the batteries correctly according to the diagram inside the battery section.
2. Do not use old and new batteries together.
3. Do not use two different kinds of batteries Although sizes may be the same, voltages may differ.
4. Do not expose batteries to excessive heat as they can leak, or explode. Do not dispose of batteries in a fire.
5. Remove batteries from the unit if it is to be stored for an extended period to avoid battery leakage which can cause malfunctions.

VIDEO CASSETTES

ENGLISH

- The VideoMovie employs only the cassettes carrying the VHS-C mark.
- *Recording onto prerecorded tapes automatically* erases the previously recorded video and audio signals.
- An inverted cassette cannot be inserted.
- Do not load and unload the cassette repeatedly without allowing the tape to run at all. This will slacken the tape and thereby damage it.
- Make certain before loading the cassette that the tape is not slack. If there is any slack, turn the gear on the cassette in the direction of the arrow to take up slack.
- The cassette is equipped with a safety tab to prevent accidental erasure. When the tab is removed, recording is impossible. If you wish to record on a cassette whose tab has been removed, use adhesive tape to reseal the slot.
- To avoid excessive exposure to dust and fingerprints, do not open the front tape cover.



Storage of cassettes

- Avoid exposing the cassettes to direct sunlight. Keep them away from heaters.
- Avoid storing the cassettes in humid or dusty places.
- Do not drop the cassettes. Do not expose them to violent vibrations or shocks.
- Do not expose the cassettes to strong magnetic fields (near a motor, transformer or magnet).
- Place the cassettes in cassette cases and position them vertically.

IN CASE OF DIFFICULTY

What may initially appear to be trouble is not always a real problem. Make sure first...

Symptoms	Check points
Power	
No power is supplied.	■ Is the battery pack correctly installed? ■ Is the battery pack charged? ■ Is the power supply unit correctly connected?
Recording	
Recording is impossible.	■ Check to see if the cassette safety tab in place. ☞ P. 41.
Recording does not start.	■ Have you set PLAY/CAMERA to "CAMERA" first?
Playback	
Tape is running, but no playback picture appears.	■ Is the TV receiver set to your video channel? ■ If A/V connection is used, is the TV's VIDEO/TV switch set to VIDEO? ■ Is the RF unit set to the correct channel?
Noise bars appear in the playback picture.	■ Use TRACKING to reduce noise bars.
Playback picture is blurred or interrupted.	■ Video heads may be dirty or worn out. For head cleaning or replacement, consult the nearest JVC Service Dealer.
Tape transport	
Tape stops during fast forward or rewind.	■ Is the "M" indication visible in the viewfinder? If so, press C. MEMORY to cancel the memory function.
Rewinding or fast forwarding is impossible.	■ Check to see if the tape has already been fully wound on one reel or the other.
Other	
Vertical white lines appear when shooting a very bright object.	■ This may occur when the background contrasts very much with the object. This is normal.
Image "flicker" occurs when shooting under fluorescent lighting.	■ Try setting the shutter speed at 1/60s. ☞P.20.
The picture is too bright or too dark.	■ Check the position of the EXPOSURE CONTROL dial ☞P.17.
Error number (E01, etc.) appears in the viewfinder.	■ Consult your nearest JVC Service dealer.

The VideoMovie is a microcomputer-controlled device. External noise and interference might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC power adapter, etc.) and clock battery; and then reconnect it and proceed as usual from the beginning.

Special note on head cleaning

Accumulation of dirt and other particles on the video heads may cause the playback picture to become blurred or interrupted. Although this VideoMovie is equipped with a built-in head cleaner which automatically cleans the heads, reducing the likelihood of dirty heads, if such troubles are encountered, please consult your nearest JVC dealer.

■ A built-in head cleaner automatically cleans the video heads and head drum whenever a cassette is loaded and unloaded to reduce head clogging.

SPECIFICATIONS

Format : VHS PAL standard
Power source : DC 6 V ⎓
Power consumption : 7 W (Light off)
10 W (Light on)
Signal system : PAL-type
Video recording system : Luminance: FM recording
Color: Converted sub-carrier direct recording
Conforms to VHS standard
Cassette : VHS C cassette
Tape speed : 23.39 mm/sec
Recording time
Max. : 45 minutes (with EC-45 cassette)

VIDEO
Output : 1 Vp-p, 75 ohms, unbalanced (via AV OUT connector)

AUDIO
Output : –6 dBs, 1 k-ohm (via AV OUT connector).

CAMERA
Pick up : 1/3"-format CCD
Minimum required illumination : 4 lux (F1.8)
Illumination range : 4 to 100,000 lux
Lens : F1.8, f = 6 to 60 mm, 10:1 power zoom lens with auto iris and macro control, filter diameter 43 mm
Viewfinder : Electronic viewfinder with 0.6" black/white CRT
Selectable high-speed shutter : Switchable (1/50, 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000 second)
White balance adjustment : Auto/Manual

GENERAL
Operating temperature : 0°C to +40°C
Operating humidity : 35% to 80%
Storage temperature : –20°C to +50°C
Weight : Approx. 720 g
Dimensions : 184(W) x 120(H) x 111(D) mm (incl. viewfinder)

AC POWER ADAPTER/BATTERY CHARGER (AA-V11EG) SPECIFICATIONS
Power requirement : AC 110 to 240 V~, 50/60 Hz
Power consumption : 23 W
Output : DC 8.5 V ⎓, 1.3 A (CHARGE), DC 6.3 V ⎓, 1.8 A (VTR)
Charging system : Constant current, peak detection, timer controlled
Dimensions : 150(W) x 42(H) x 68(D) mm
Weight : Approx. 350 g

CASSETTE ADAPTER (C-P6U) SPECIFICATIONS
Dimensions : 188(W) x 25(H) x 104(D) mm
Weight : Approx. 240 g
Accessory : "R6"-size battery x 1

PROVIDED ACCESSORIES
AC power adapter/battery charger AA-V11EG
Battery pack BN-V12U
A/V output cable
Cable adapter
Lithium battery.....CR2025
Remote control unit.....RM-V704U
Cassette adapter C-P6U
Shoulder strap..... VU-V220U

For optional accessories, ☞ P. 36

E.&O.E.Design and specifications subject to change without notice.